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NETHERLANDS ANTILLES

Education : Issues and priorities for development

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in Educational Policy and Planning

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F O R E W O R D

The present report was prepared at the request of the Government of the Netherlands Antilles. It is based on documentation made available to the Secretariat of Unesco as well as on data collected by a mission which visited the country in January and February 1976. The mission consisted of :

Messrs. W. Van Vliet (leader of the mission)

H. Unterbrunner (specialist in technical education)

T. Sy (specialist in general education)

The report is not intended to be a comprehensive survey of the national system of education, but focuses on what seem to the Unesco Secretariat to be the main issues and problems facing the Government in connection with the further improvement and development of its education services. These issues and problems are defined and analysed. Further, with regard to certain problems of a technical character the Secretariat has expressed definite views or recommendations which are based on experience gained in a number of other countries. On the other hand, the Secretariat has deliberately abstained from making recommendations on issues pertaining to educational policy, because in our view a choice between alternative solutions can only be made by the Government.

I do hope, however, that the report may be useful as a basis for discussions within the Government and, perhaps, with other bodies directly or indirectly concerned with the development of education in the Netherlands Antilles.

Amadou-Mahtar M'BOW
Director-General

United Nations Educational,
Scientific and Cultural Organization

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SUMMARY AND CONCLUSIONS

i. The Netherlands Antilles consist of six islands in the Caribbean sea. Three of these namely Aruba, Bonaire and Curaçao (Leeward Islands) are situated off the north Coast of Venezuela, and the other three, namely Saba, St Eustatius and St Maarten (Windward Islands) are located some 600 Km to the North East, not far from Puerto Rico. The total population is 234,000 ; of these, 152,000 live in Curaçao and 62,000 in Aruba. The official language is Dutch, and this is also the language of instruction in schools of all levels. The colloquial languages are English in the Windward Islands and Papiamentu in the Leeward Islands. Papiamentu has developed from the early African, Spanish, Portuguese and Dutch inhabitants. The main sources of income are commerce, tourism, and the oil refineries in Aruba and Curaçao. Agriculture and fisheries are of little economic importance and provide employment for less than two percent of the labour force.

ii. Since 1954, the Netherlands Antilles have been fully responsible for domestic affairs, including education. However, they decided to continue the Dutch system of education and subsequently introduced whatever changes were made in the Netherlands, so that even today education in the Netherlands Antilles is the same as education in the Netherlands in all respects : organization, administration, legislation, structure, curriculum, etc ... This is clearly an advantage to the Dutch families residing temporarily or permanently in the Netherlands Antilles, for their children may at any stage in their school career transfer to a school in Holland. But they are not the only ones in favour of continuing the Dutch system of education. Many Antillians argue that it will never be possible for a small community like their own to provide sufficient opportunities for higher education, that by virtue of having the same system as the Netherlands, school diplomas issued in the Netherlands Antilles are recognized by Dutch Universities and that, furthermore, these Universities readily accept students from the Netherlands Antilles. They believe that if the system were to be changed, they would have to turn to some other country and presumably have to introduce that country's system of education in order to obtain the same advantages, and that it would not be easy in any case to find another country willing to accept students from abroad so systematically. The logic may not be impeccable but the argument sounds eminently plausible to those who are prepared to overlook the fact that the vast majority of children will not go to University, no matter what system prevails.

iii. An argument against the present system is that many Antillian children are unable to benefit fully from the educational opportunities offered to them, mainly because of the difficulty in following instruction in a foreign language right from the start, i.e. in kindergarten and primary school. It would obviously be much better for them to learn in their own language - and to learn their own language properly - at least at these two lower levels of education. This may seem a simple question of common sense, but it is complicated by the related issue of the language to be used at the secondary level, which presumably would also be the official language of communication. Dutch might be continued as the official language but there are many good arguments in favour of either English or Spanish. The issue is largely political and as such falls outside the scope of the present Report, although in taking its decision the Government will no doubt wish to consider, *inter alia*, its educational implications.

iv. Another difficulty inherent in the present system stems from the high degree of structurization of secondary level education. Upon completion of the six-grade primary school children have, at least nominally, a large number of options. They may seek admission to a six-year school preparing for entrance to a University (VWO), or to a five-year general secondary school (HAVO), or to a middle school (MAVO) which offers a programme that may be completed in three years by fast learners or in four years by those who prefer to proceed at a slower rate. Alternatively, they may apply to one of several types of vocational schools : the ETAO which prepares for employment in commerce and tourism, the lower technical school (LTS) which provides two or three years of prevocational training and is sub-divided into three streams according to the proportion of time set aside for theoretical and practical subjects, and domestic science schools (LHS) for girls sub-divided into two streams. However, the decision as to whether a child will be admitted to a given school rests with the authority that runs the school, that is to say with private School Boards, for about 80 percent of the schools and the Island Governments for the remaining 20 percent. Their decisions are based on an examination and/or a psychological test of the candidate's intelligence and his proficiency in language and arithmetic. But whatever the technique, the selection process takes place at too early a stage in the child's development and this would seem to apply in particular to those children whose development has already been slowed down by the difficulty of receiving instruction in a foreign language.

v. The present system of education may also be examined from an entirely different point of view, namely its relative efficiency. On the basis of available data it would seem that three types of schools are operated with somewhat less than normal efficiency. The primary school suffers from the fact that a large proportion of children are obliged to repeat (something like 20 percent per grade) and that an undetermined number drop out before reaching the sixth grade. As a result, a great many pupil years are provided in excess of those normally required or, to put it another way, primary education is much more expensive than it should be. Likewise, upper general secondary education (VWO/HAVO) would appear to be too expensive but for a different reason : namely the low pupil teacher ratio (14 : 1) resulting from offering too many options to too few students. Third, the lower technical school (LTS) seems to be unable to attain its objective to train boys for employment in industry, as potential employers are reluctant to take on LTS graduates. This is not surprising as experience in many other countries has shown that vocational training at this level is not an efficient proposition.

vi. The relatively low efficiency of certain types of education and the fact that a large number of Antillian children are unable to benefit fully from the education services made available to them, may with some justification be regarded as the undesirable consequences of the policy to develop education in the Netherlands Antilles on the same pattern as in the Netherlands. It would, of course, be possible to take remedial action designed to obviate certain difficulties and to increase the efficiency of the system, but the risk is that this would lead to a barely coherent series of stop-gap measures. A more positive development would require a truly Antillian education policy based on the culture of the islands and their potential for social and economic growth.

vii. Pending the elaboration of an authentic Antillian policy it is suggested that the Government might in the first instance aim at a more equitable distribution of education services, in the sense that all children - and not merely a minority or, for that matter, a majority - should benefit to the fullest extent possible from educational opportunities and that, in particular, all children should have a fair start in life. This suggestion is based on the belief that the notion of equity will be acceptable to all concerned - those in favour of maintaining the Dutch system as well as those who argue in favour of change - or that, at a minimum, it will provide a common ground for further discussion.

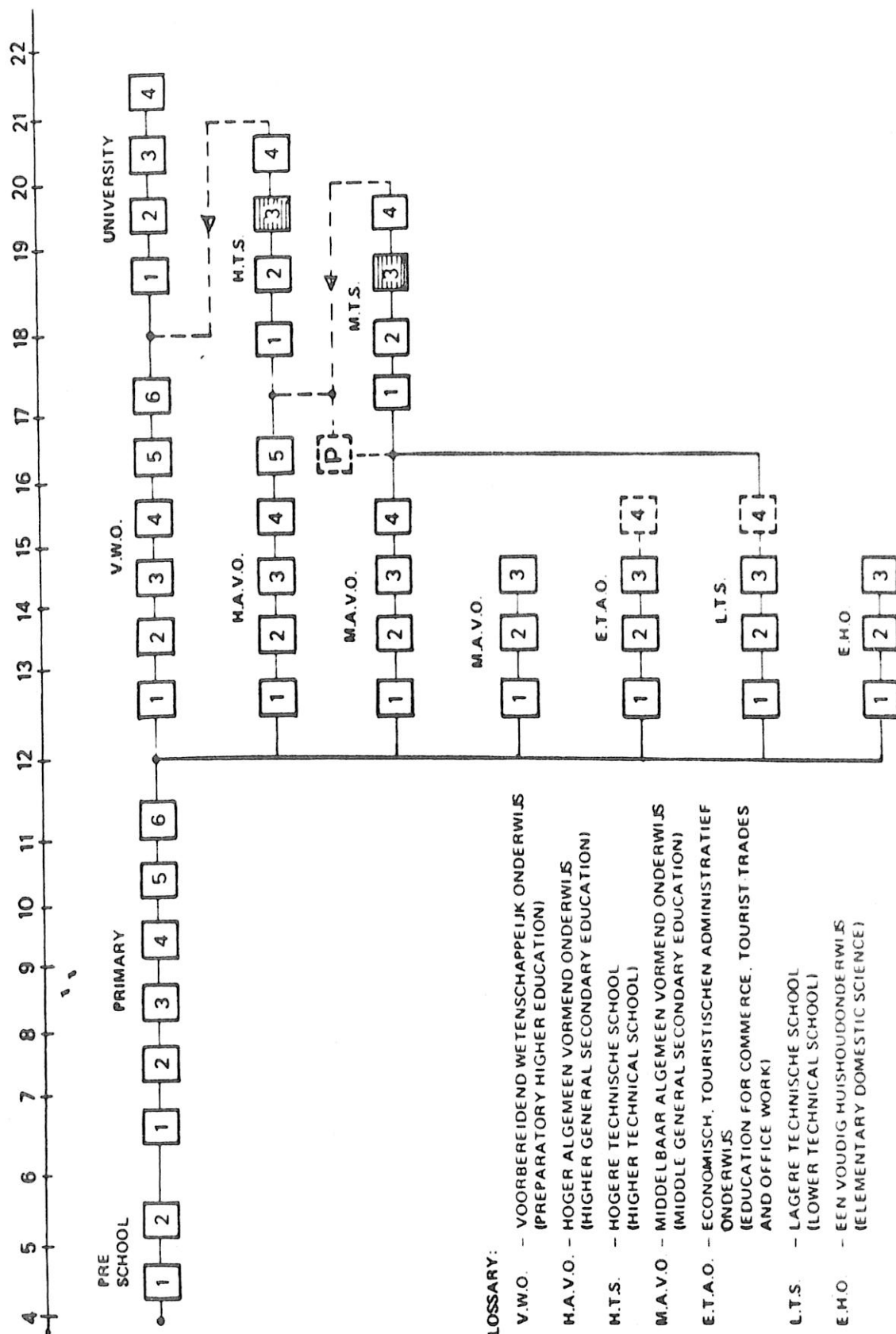
viii. If this principle is accepted, priority should be given to the development of education for the age-group 4 to 15. Thus, pre-primary education which is now limited to some 70 percent of the children, partly for lack of suitable classrooms, and partly because some parents cannot afford a financial contribution, should be made available to all children in the relevant age-group. Again, the use of the mother tongue should be introduced as the language of instruction in both kindergarten and primary schools, not merely in the light of efficiency criteria but also and above all as a matter of equity. Third, it would seem necessary to reorganize education in the first cycle of secondary education with a view to ensuring that children at age 15 or 16 have had sufficient basic education to allow them either to enter the world of work or to pursue their studies or practical training.

ix. The detailed elaboration and execution of a programme of this sort calls for a number of decisions on basic issues as well as on practical problems. However, administrative responsibility is at present divided between the Central Government, the Island Governments and the School-Boards in such a way that it is difficult to take any decisions, and the absence of up-to-date statistical data further impedes the decision-making process. A reform of the administrative machinery would, therefore, be a pre-requisite for the success of any educational development plan.

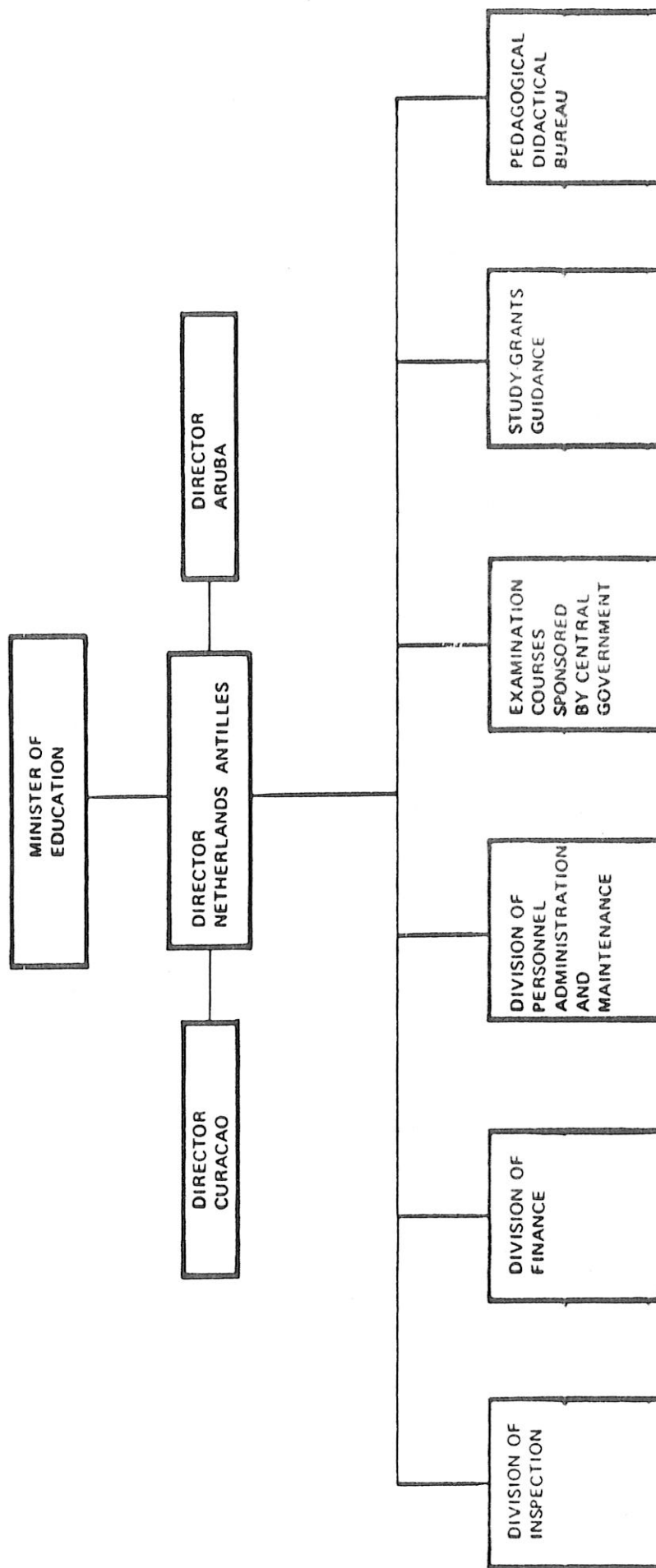
Basic data

A	<u>AREA</u>	993 sq .km
B	<u>POPULATION</u>	234,000
C	<u>ECONOMIC DATA</u>	
	Per capita income	: approximately \$ 1,500 per year
	Currency	: 1 US \$ = 1,80 Netherlands Antilles florins (NAf)
	Main sources of income	: oil industry, tourism, commerce
D	<u>EDUCATIONAL EXPENDITURE</u>	
	1. Estimated expenditure on Education	
	- 40 percent of total Government expenditure	
	- 8 percent of G.N.P.	
	2. Estimated recurrent cost per pupil per year (Curaçao only)	
	- Pre-primary	US \$ 258
	- Primary	US \$ 429
	- Lower secondary	US \$ 799
	- Full secondary	US \$ 1,419
	- Lower vocational	US \$ 1,037
	- Technical	US \$ 1,503
E	<u>EDUCATION</u>	
	Enrolment in schools :	66,300
	- Pre-primary	7,800
	- Primary	41,300
	- General secondary	10,100
	- Vocational	7,100

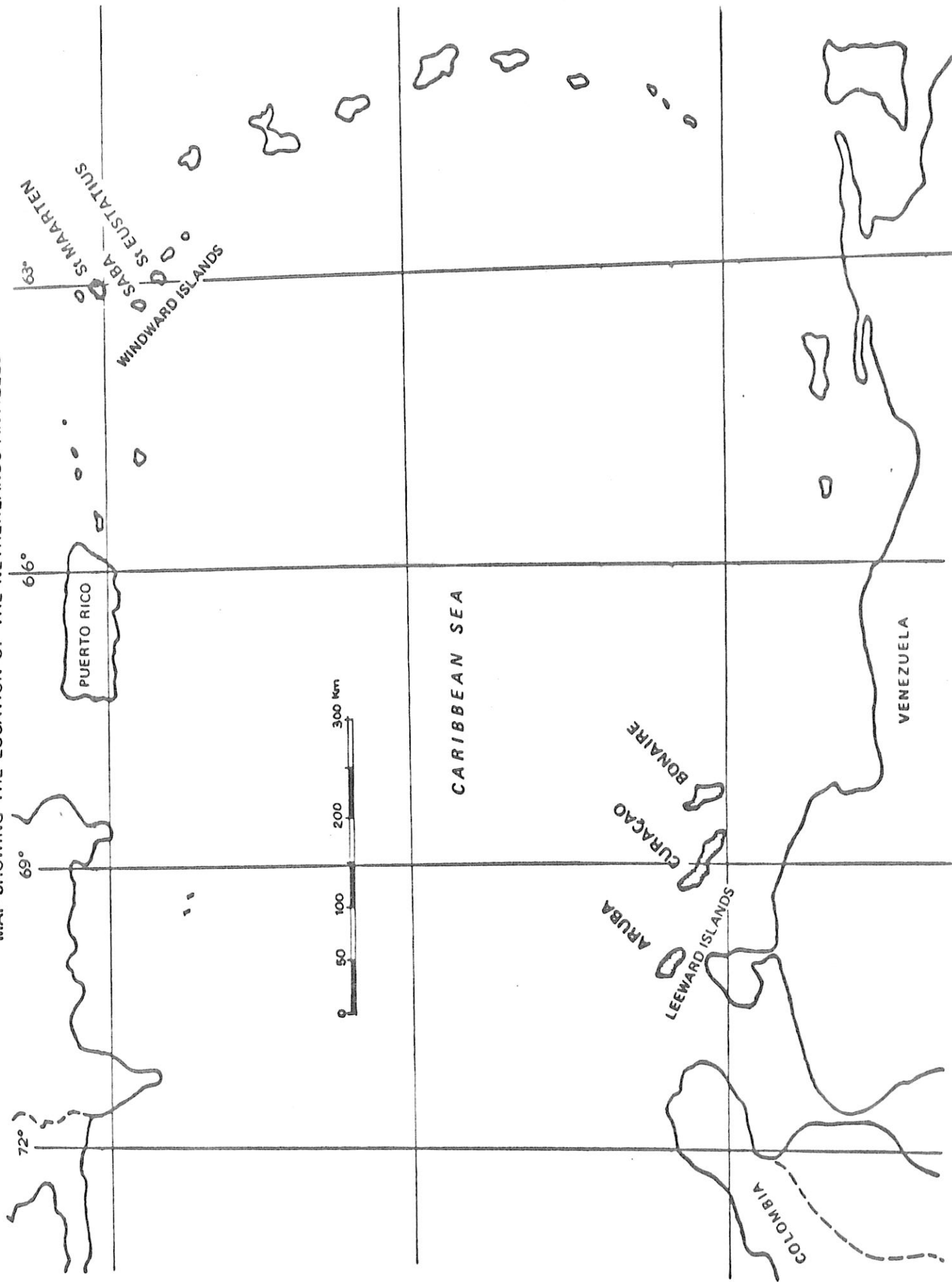
NETHERLANDS ANTILLES: EDUCATIONAL STRUCTURE



NETHERLANDS ANTILLES: ORGANIZATIONAL DIAGRAM, MINISTRY OF EDUCATION



MAP SHOWING THE LOCATION OF THE NETHERLANDS ANTILLES



CHAPTER I - GENERAL BACKGROUND

1 Geographical

1. The Netherlands Antilles consist of six islands located in the Caribbean Sea. Three of them, namely Aruba, Bonaire and Curaçao (Leeward Islands), are close together and at a relatively short distance (25-65 km) from the north coast of Venezuela. The largest island, Curaçao, has an area of 444 square km and a population of 152,000. The climate of the Leeward Islands is to a large extent determined by the prevailing easterly trade winds. Average temperature is 27.5° C and sunshine is fairly constant throughout the year. Average annual precipitation is 575 mm in Curaçao, and a little less in Aruba and Bonaire. This is hardly enough for agriculture, especially since two-thirds of the rainfall occurs during the period October to February. The population of Curaçao and Bonaire is mainly of African descent, and that of Aruba is predominantly of American Indian origin. However, the three Leeward islands (sometimes called ABC Islands) have a common language, namely Papiamentu, which has developed from the early Spanish, Dutch, Portuguese and African inhabitants. Although Dutch is the official language, Papiamentu is spoken in most of the homes, and is also widely used in offices, shops, radio, television and newspapers. More than 80 percent of the population is Roman Catholic.

2. The other three islands, St. Maarten, Saba and St. Eustatius (Windward Islands), are located some 800 km to the north-east, not far from Puerto Rico. The northern half of St. Maarten is part of the French Overseas "Département" of Guadeloupe. The Windward Islands are very much smaller than the ABC islands and have a total population of 12,000, mostly of African origin. The climate differs from that in the Leeward Islands in one respect, namely the much heavier rainfall which permits tropical vegetation. The official language is Dutch, but the colloquial language is English. Most of the inhabitants belong to Protestant Christian churches.

2 Historical and Political

3. During the 16th century the Leeward Islands were occupied by Spain. They were conquered during the first half of the 17th century by the Dutch who also settled on other islands and territories in the region. It was not until 1845, however, that the six islands were constituted as one administrative entity under the name of Netherlands Antilles, with Curaçao as the seat of the Central administration.

4. In 1954, a Charter (Statuut) gave the islands full autonomy in domestic affairs. The Executive Government of the Netherlands Antilles consists of a Governor and a Council of Ministers headed by a Prime Minister. The ministers are responsible to a body of elected representatives from Curaçao (12), Aruba (8), Bonaire (1), and the Windward Islands (1), called "Staten". Legislative power rests with the Governor and the Staten.

5. Furthermore, there are four local governments, namely one for each of the ABC islands and one for the Windward islands. Each of these comprises a Governor, one or more Commissioners and an Island Council. The Island Council and the Governor may issue ordinances with respect to island affairs such as, for example, education.

6. The Netherlands and the Netherlands Antilles constitute one single realm

under the House of Orange. Queen Juliana is the Head of State of the Netherlands Antilles. She is represented by the Governor, who also represents the Government of the Kingdom. Conversely, a Minister Plenipotentiary represents the Government of the Netherlands Antilles in the Hague. The Council of Ministers of the Netherlands transforms itself into the Council of Ministers of the Kingdom as a whole, whenever matters of joint interests are discussed, in practice defense and foreign affairs. On these occasions the Minister Plenipotentiary of the Netherlands Antilles participates in the deliberations with full voting rights.

3 Economical

7. Agriculture and cattle raising are of little economic importance and together with fisheries provide employment for less than two percent of the labour force. As was noted before, rainfall is insufficient ; further, the soil is eroded as a result of deforestation and roving herds of goats. Fishing might be developed, but at the present time fish, like nearly all other goods for domestic consumption, are imported. In fact, the only natural economic assets of the islands are their good harbours, their location on important trade routes, a good climate and sandy beaches.

8. The establishment of oil refineries in Curaçao (1916) and Aruba (1924) transformed the economies of the islands. Increased job opportunities and higher wages brought a reasonable degree of prosperity, not only to these two islands but also to migrants from Bonaire and the Windward Islands. In the early 1950's the total number of workers in the refineries was over 20,000. However, this number decreased steadily ever since, partly as a result of new refineries built in Venezuela, partly as a result of automation, and it is now approximately 5,000.

9. The most striking development during the past ten years has been in the tourist industry. The tropical climate, sandy beaches, good air connections and government incentives such as tax remittances and freedom to open casinos combined to attract large numbers of tourists. In Curaçao, the number of tourist-nights increased from 38,000 in 1964 to 123,000 in 1973. In Aruba, during the same period, the number rose from 20,000 to 95,000. The most spectacular development took place in St Maarten, with an estimated number of 5,000 tourist-nights in 1964 to over 50,000 in 1973. In addition, a considerable number of cruise tourists visit the Netherlands Antilles (307,000 during 1973).

10. Other sources of income are provided by banking, trade and various small industries. Banking and trade expanded in connection with the oil and tourist business. The smaller industries are partly import substituting manufacturing (beer, cigarettes, paint, etc), and partly export, notably electronics (Schlumberger, International Rockwell).

11. The labour force was estimated at 82,000 men and women in 1974, i.e. about 35 percent of the total population. Since automation began in the oil industry, there has been a fairly high level of unemployment. The ratio was 14 percent in 1972 and is currently of the order of 17 percent or higher of the labour force.

12. National accounts have not been kept systematically and no data are available on current national income. In 1972, GNP per capita was estimated to be US \$ 1,500. This was higher than in most other countries of the region

(e.g. Trinidad and Tobago \$ 970, Guadeloupe \$ 910, Jamaica \$ 810, Barbados \$ 800, Costa Rica \$ 630). However, the growth rate of GNP per capita during the period 1965 - 1972 was lower than in these countries, namely 0.6 percent per annum only. (Source : World Bank Atlas).

13. As regards prospects for further development, it would seem that the traditional sector of the economy, namely the oil refineries in Aruba and Curaçao, will play a relatively less important role in the future. At the present time, these refineries are working at 50 percent of capacity and, in Curaçao at least, a fairly large proportion of workers is already redundant. On the other hand, the recently constructed oil terminal in Bonaire, and the terminal under construction in St. Eustatius, may provide additional job opportunities. Furthermore, there is a good possibility of finding oil in a Saba bank, and prospects for finding oil elsewhere in the Netherlands Antilles. Finally, other sectors of the economy, notably tourism, commerce and banking could be developed further.

14. Future development evidently depends on a number of factors, many of which are of the nature of things unpredictable. But it seems fairly certain that two factors will enhance the feasibility of greater prosperity. One is a more systematic flow of information and a better co-ordination between the islands. The fact that at present each of the tourist islands has its own information service in North America is eloquent in this respect. The other factor is the development of human resources. It has been noted that there is a fairly high rate of unemployment. At the same time, however, industry and commerce as well as government services are unable to find competent personnel, in particular book-keepers, accountants, and medium-level technicians ; in many instances staff have to be recruited from outside the Netherlands Antilles. This, incidentally, also applies to teachers in secondary and even primary schools. The need is not simply for middle-level personnel but also for a better training of skilled workers, for example in the hotel industry. The implication of this situation with respect to the national system of education (the largest industry !) will be obvious, namely that education should not merely be regarded as a social or cultural benefit, or as an economic benefit for individuals, but should also contribute to the economic growth of the nation as a whole.

CHAPTER II - THE DECISION-MAKING PROCESS

1 Introduction

15. The Netherlands Antilles are faced with a number of issues which require an urgent decision. Among the most important ones are the use of Dutch as the medium of instruction in primary schools, the adaptation of the system to local and regional conditions and the formulation of policy guidelines for educational development. In addition, there are several problems of a more technical nature, such as the large number of repeaters in primary and lower secondary schools, the soaring cost of education and the relatively low efficiency of the system. These issues and problems have been discussed for years by the Government, the School Boards and the Teachers' Unions. All concerned would agree that something ought to be done, but there is no agreement as to what should be done. Subsequent sections of the present Report will attempt to analyse some of these issues and problems, and to suggest alternative solutions which the Government may wish to consider. But before turning to these specific questions, it would seem useful to discuss briefly what is involved in the decision-making process. Indeed, there would be no point in suggesting solutions if no decisions can be taken anyway.

16. At first sight, it may seem that decisions on educational matters are simply being postponed until a decision has been taken on the larger question of complete independence from the Netherlands. Indeed, most of the issues and problems mentioned in the preceding paragraph stem from the fact that the Dutch have introduced their own system of education in the Netherlands Antilles. The administration of the system, which is based on the conviction that Roman Catholic, Protestant and non-denominational schools should all have the same rights, is a faithful copy of the Dutch way of management by division. The structure of education - six years primary followed by different types of second-level education - is identical to that in Holland. Again, the curriculum followed in schools of all types and levels is basically what is taught in Dutch schools. However, the link between decisions on education and the decision on independence is at its most tenuous. Even if the Netherlands and their former colony in the Antilles should decide to stay together, it would still be necessary to change education in the Netherlands Antilles, and no one in Holland would object. Furthermore, the Netherlands Antilles have been completely autonomous with respect to all internal affairs, including education, since 1954.

17. Nor would it be fair to say that the continuous postponement of decisions on educational problems is primarily due to the inability of those responsible for education to make their minds up. There is a more objective and more fundamental reason, namely the extraordinarily complicated decision-making processes and the fact that the responsibility for making decisions is divided in such a way that no body, governmental or non-governmental, is fully responsible for any sort of school. This type of management, originated in Holland as the outcome of the "school struggle" during the nineteenth and early twentieth centuries.

2 Analysis of the decision-making process

18. There are several aspects of management that tend to obstruct the decision-making process. One of them is the separation of power between legislation and the financing of education. In most countries (including

the Netherlands) they are vested in one body, namely the elected Parliament. In the Netherlands Antilles, however, legislation is the prerogative of the Central Parliament (Staten) although education is financed separately by each of the islands. This arrangement might be workable if legislation were limited to fairly general guidelines, but, for reasons to be explained later, education in the Netherlands Antilles is regulated in great detail. Thus, the number of weekly periods to be devoted to each subject for all schools at the primary and secondary level is prescribed by law. Similarly, the status of the teachers, the number of teachers per school as a function of enrolment (e.g. a school may appoint 6 teachers if the enrolment is at least 201) and the organization of examinations are all determined by decisions of the Central Parliament. The financial repercussions of this and similar legislative action, which have to be absorbed by the Island Governments, might be considerable. For example, a decrease in class size, the addition of weekly periods for a given subject, the change-over from one language to another, would significantly increase the cost of education. The 22 members of the Staten are, of course, fully aware of this situation, particularly since in a way they also represent the islands (12 from Curaçao, 8 from Aruba and one each from Bonaire and the Windward Islands). They would tend to leave things as they are rather than voting rashly for measures that would increase the already very high education budgets of the islands. Thus, the legislative responsibility of the Staten is limited by the financial constraints of each island, and the financial responsibility of the islands is limited by the legislative power of the Staten.

19. The Executive branch of the Government is divided along lines that run parallel to the sharing of legislative and financial responsibility. At the central Government level, the Minister of Education, assisted by a Department of Education, is responsible for the application of national legislation, and at the island level, a Commissioner for Education, assisted (at least in the two largest islands) by yet another Department of Education, is primarily responsible for the application of financial rules and regulations promulgated by the Island Council. Since inspection of schools is carried out by the Central Department of Education only, the Commissioners do not have any direct control over expenditure, but this does not mean that they are unconcerned about financial or, for that matter, educational problems. The fact that in an island like Aruba, with a total population of 60,000, there are two Departments of Education both dealing with the same schools, naturally leads to some frustration.

20. The situation is complicated further by the circumstance that some eighty percent of all primary and secondary schools are private schools. Parents have the constitutional right to demand for their children, at the expense of the Government, the type of education that corresponds to their religion or philosophical convictions. Since the vast majority of the population is Roman Catholic, nearly all the private schools are Roman Catholic schools. They are operated by School Boards, that is to say the School Boards decide whether or not to admit children to their schools and what textbooks will be used, and they appoint the teachers. Provided they comply with legislation, all the expenses of their schools are paid by the Island Government. The Island Governments themselves are responsible for the day-to-day management of the remaining twenty percent of schools, and this, incidentally, enables them to draw up "norms" for expenses like school furniture, teaching materials, maintenance of buildings and so forth, which serve as a basis for the reimbursement of various categories of expenditure

incurred by the School Boards. But the point is that the Island Governments (which pay for education) have practically no say in the day-to-day operation of some 80 percent of the schools in their territory.

21. With educational authority thus being divided between the national government, the Island Government and School Boards, it is not surprising to find that teachers' unions play a singularly important role. They are not using their influence to improve the status of the teachers, and there is no reason why they should, because teachers in the Netherlands Antilles are among the best-paid teachers in the world, even in absolute terms, but they focus their attention on general educational policy and planning. Thus, the Teachers' Union of Curaçao recently advocated the elaboration of a long-term plan for educational reform which should include, inter-alia :

- a) A fundamental restructuration of the system of education so as to better adapt the system to society,
- b) Equal educational opportunities for all children,
- c) Application of a policy of nation-building.

In addition, the Union has listed a number of points which, in their view, should be taken into consideration in drawing up a medium-term plan, as well as a series of measures that should be carried out in the immediate future. One of these is that the Teachers' Union should be invited to participate actively in the formulation of educational policy, and this is natural enough, but the initiative for policy formulation might with advantage have been taken by the authorities.

22. There is one further point to consider. Decision-making is not merely a matter of having the authority to do so, it also requires having the necessary information on which rational decisions can be based. In the Netherlands Antilles it would seem that the several educational authorities and the teachers' unions each have some of the data but that no one has all the necessary data to take decisions on important issues. Thus, the inspectorate of the Central Department of Education have information on the performance of teachers, but this is not necessarily made available to their employers, i.e. the School Boards. Conversely, the School Boards have up-to-date statistics on enrolment, but no one else seems to have them ; in any case, it appears that no one has all the necessary statistics, not even the simplest statistics on enrolment by grade and age, for all the schools in all the islands. Other important data, such as absenteeism of children and teachers, simply do not seem to be recorded systematically by any agency. Financial statistics are kept by Island Departments, but are not analysed in conjunction with other educational statistics. In the absence of the necessary basic data, it is not surprising that most discussions are somewhat theoretical and academic. For example, the introduction of Papiamentu has been discussed for years, but no one seems to have figured out the cost in terms of retraining of teachers, printing of textbooks, etc.

23. To sum up : the fact that decisions on a number of important issues and problems have not been taken is due, in our opinion, to structural flaws in the decision-making process. There are too many authorities involved, namely the Central Government, the Island Governments, the School Boards and, in a technical capacity, the Teachers' Unions. Each of these agencies is respon-

sible for part of the education system, but no agency is fully responsible. It follows that decisions affecting the entire system of education cannot be taken except with the agreement of all concerned. The situation is aggravated by the circumstance that the statistical and financial data on which rational decisions should be based do not appear to be readily available to any of the authorities.

3 Alternative management systems

24. The solution of the problem would seem obvious, namely to allocate overall responsibility for education to one authority, and to enable that authority to collect and analyse all the data it needs to make rational decisions. The authority could be the National Government, in which case the administration of the system would be more centralized than is the case at present, or it could be the Island Governments, in which case it would be more decentralized. A more excessive kind of decentralization, whereby the School Boards would have a higher degree of autonomy, could also be considered.

25. A higher degree of centralization would involve, at a minimum, that all the responsibilities at present vested in the Island Governments be transferred to the Central Government, so that there would be one (national) budget for education voted by the Staten, on national educational authority, namely the Ministry of Education and one financial central organ, namely the Ministry of Finance.

26. It would also require a reorganization of the Ministry of Education with a view to strengthening its managerial capability. At present, the senior staff of the Ministry appear to be too occupied with the day-to-day administrative functions such as inspection, examinations, study grants, etc. to give much attention to policy and planning issues. It is not proposed to set up a separate planning unit, and even less that policy and planning should become the prerogative of the Pedagogical Didactical Bureau. Management, policy and planning can only be carried out effectively by the Director of the Department and his senior collaborators, along general guidelines provided by the Minister. But to do so, the top-level staff of the Ministry would have to be liberated from some of their present routine administrative functions, which, it seems, could in any case be carried out by more junior staff.

27. Further, it would seem advisable to set up within the Ministry a service responsible for the collection and analysis of financial and statistical data, preferably under the direction of an economist. This service would have two main functions. Firstly, it would provide the management of the Ministry with the relevant information required for making rational decisions. Secondly, it would enable the Ministry to collaborate with the Ministry of Finance with a view to ensuring that funds for education are spent efficiently. In this context, "efficiency" is taken not only in the sense of avoiding waste of money, but also, in a more positive sense, that funds are used to attain agreed objectives.

28. A higher degree of decentralization would go in the opposite direction, i.e. a transfer of responsibility from the Central Government to the Island Governments. In this case the Central Government might retain its responsibility for higher education, but legislation would be the concern of each island. In other words, the island councils would not only decide on financial

matters, but also educational affairs, such as, in particular, the curriculum and the structure of their respective systems of education. It goes without saying that in that event the inspection of schools would also be taken over by each of the islands.

29. It would not be unthinkable to push decentralization a step further, by giving autonomy to the Schools Boards as regards the type of education to be offered, the curriculum to be followed, the language of instruction to be used, and the employment of teachers. A number of schools might thus become "private" schools in the strict sense of the term, similar to the English "Public schools". Some of them might be Papiamentu, others Dutch, English or Spanish. They could be subsidized either by the Central Government or by the Island Governments on the basis of say, their performance in State examinations, or they could finance themselves by levying school fees, or they could be partly subsidized and partly self-financing.

30. In either case - decentralization at the island level or decentralization at the school level - it would be necessary to strengthen the Island Departments of Aruba, Curaçao and St Maarten by establishing a financial-statistical service with functions similar to those outlined above (para.27) for the Ministry of Education. Together with the inspectorate, this would mean a considerable expansion of the Island Departments of Education.

31. The advantages and disadvantages of decentralization will be obvious. On the positive side, a situation where each of the islands runs its own system would permit a better adaptation of education to local conditions. These local conditions vary a great deal, even with respect to language, and some of the islands are far apart. Secondly, it would be in conformity with the structure of other Government services where the islands have the main responsibilities (water and electricity supply, police, customs, health, etc.).

32. On the negative side one should consider, firstly, that most of the islands are not large enough to sustain a complete system of primary and secondary - level education, and that none of the islands is large enough to provide any form of higher education. Secondly, decentralization at the island level would eventually lead to the establishment of four mini-systems (Aruba, Curaçao, Bonaire and the Windward Islands), which in turn would be detrimental to national unity. Thirdly, it would be more expensive, not only because there would be duplication at the administrative level, but also because the class size of certain types of schools at the secondary level would probably have to be very small.

33. If, as seems likely, the disadvantages of decentralization outweigh the advantages and if, furthermore, the Government should decide on a more centralized form of management, consideration should be given to two factors that might impede the smooth functioning of the system, namely too much rigidity and too much authority.

34. Centralization does not necessarily imply rigidity. The present system is, in fact, very rigid as regards the curriculum because of the many laws, decisions, rules and regulations initiated by the Central Department of Education. There might well be an advantage in leaving the School Boards and the heads of schools a greater flexibility in the organization of timetables and giving the teachers more opportunities to use their imagination and creativity. In any case, there would probably be no harm in the Ministry of

Education devoting less time to legislation and more to policy, planning and guidance.

35. Nor does centralization have to be thought of as authoritarian management. Since policy is applied and plans are carried out (or not) by the School Boards and the teachers, it is a simple matter of common sense to invite the School Boards and the teachers to participate in the planning exercise. Such participation presupposes, of course, that the Ministry make available relevant information, including both financial and statistical data, to all the participants before calling a meeting to discuss draft proposals and, further, that no effort be spared to achieve a consensus.

36. In conclusion, the present system of educational administration does not seem to work efficiently because responsibility is divided among too many authorities. Specifically, under present arrangements it is extremely difficult to make the right decisions or, for that matter, to take decisions at all. To overcome this difficulty it has been suggested that the Government may wish to introduce either a more centralized or a more decentralized form of management. A discussion of the relative advantages and disadvantages involved tends to show that a more centralized form of management would be preferable.

CHAPTER III - THE MAIN ISSUES

1 Status quo or change ?

37. Much of the discussion on education in the Netherlands Antilles centres around the question as to whether the present Dutch system should be continued, or whether it would be better to introduce some other system. Those in favour of continuing with the Dutch system argue that it will never be possible for a small country like the Netherlands Antilles to have a complete system of its own and that, in particular, it will always be necessary to turn to some other country for various forms of higher education. By virtue of having the same system as in the Netherlands, school diplomas issued in the Netherlands Antilles are recognized by Dutch universities and, furthermore, these universities accept students from the Antilles. If the system were to be changed, the Netherlands Antilles would have to turn to some other country (and probably have to adopt that country's system of education) in order to obtain the same advantages, and it would not be easy to find another country willing to accept students from abroad in any systematic or automatic fashion.

38. The fact that the Dutch language serves as the medium of instruction in schools of all levels in the Netherlands Antilles is often used as the main argument against using the Dutch system of education. Dutch is a foreign language for nearly all children. Their mother tongue is Papiamentu in Aruba, Curaçao and Bonaire and English in the other islands. The language problem is thus a very real one, but it is not an argument against the Dutch system of education as such. One could easily imagine using the Dutch system but without using Dutch as the medium of instruction. It is, therefore, proposed to separate the two issues and to discuss, first, the language issue and next the suitability or otherwise of the Dutch system for the Netherlands Antilles.

2 The language issue

39. The Dutch language is used as the medium through which all children are supposed to acquire a certain amount of knowledge and skills, but in fact, only a minority of children are able to do so. More and more, those who are successful in their examinations are Dutch children, followed by children from upper class families, and it is not certain that these are the most gifted or make the biggest effort. They owe their success to the fact that Dutch is the language they speak at home. In other words, the use of the Dutch language, particularly in the primary school, tends to make the system elitist, as witnesses the fact that the majority of those enrolled in schools for full secondary education (VWO and HAVO) are children from better class families.

40. Most Antillian children enter secondary schools without a sufficient knowledge of the Dutch language, and those who leave at the end of the primary school tend to lapse into illiteracy. The proportion of Antillian children who speak Dutch is not known exactly but it is probably a fair estimate that in the Leeward Islands about 80 percent of the children speak Papiamentu only at the time they enroll in Kindergarten schools. If it were decided to introduce Papiamentu in the primary school as the language of instruction, Antillian children would have the advantage of being able to learn in the language they speak and which they use in their daily lives. It would, furthermore, help to preserve the cultural identity of these children, and give them a more equal chance in continuing their studies.

41. This is equally valid for children in the Windward Islands, whose mother tongue is English. They should be allowed to follow their education in English, and unlike Papiamentu this should not create any problem (1).
42. The decision to use the mother tongue in basic education has been taken long ago in a number of multilingual countries like Canada, Switzerland and the U.S.S.R. Thus, in the Soviet Union, children may attend national schools, where tuition is given in their native language, or Russian schools, according to their choice. Tuition is conducted in nearly 100 languages throughout the Soviet Union. More recently, a number of multilingual developing countries in Africa, such as Somalia and Zaïre, have adopted the same solution.
43. A related issue is the choice of a language for post primary general and technical education. The use of Papiamentu is restricted to a small geographical area, and it does not lend itself to the teaching of technical or scientific subjects, so that it will be necessary to adopt a modern language of wide communication. It seems that a choice will have to be made amongst three languages, namely Dutch, English and Spanish.
44. Dutch has the advantage of being known. It has been the official language since 1818, it has the possibility of transmitting technical and scientific know-how, it occupies a privileged position in the political and administrative life of the country, and last but not least all teachers have been trained to teach in that language. But as it is not spoken in other parts of the Caribbean, it would not be of use for communication within the region where the two languages most widely spoken are English and Spanish. English has the advantage of already being the language of a minority, namely the population of the Windward Islands, and is also economically important in connection with the oil industry and tourism (90 percent of the tourists come from North America). Spanish has the advantage of being easy to learn by those who already know Papiamentu, since the two languages are very close - in fact, so close that some advocates of Papiamentu fear their language would not survive very long if Spanish were chosen as the second language. A choice between the three languages evidently falls outside the scope of the present Report, because it will to a large extent be determined by cultural, economic and political factors, but in taking its decision the Government will no doubt also wish to consider its educational implications. In fact, whatever language is chosen will no doubt have to be taught, at least as a foreign language, in the primary schools.
45. The use of one language as the medium of instruction in the primary school, coupled with the need to use another language for subsequent levels of education as well as for official communications would probably involve lengthening the period of basic education. Even if a good deal of time is set aside for learning the second language in the primary school as a foreign language it is unlikely that children will, in the course of 6 years, acquire a degree of proficiency that would enable them to follow instruction in that language or, in the case of school leavers, to use it effectively as a language of communication. That is to say, all children would need to continue education after the primary school, if only for the study and the practice of the second language.

(1) One of the difficulties in using Papiamentu is the fact that there is no agreed orthography. A Committee established to study the matter has not yet formulated its recommendations.

46. However, this would not pose much of a problem in the Netherlands Antilles because most children stay at school in any case till about age fifteen. In 1972, 89 percent of the thirteen year olds, 85 percent of the fourteen year olds, and 80 percent of the fifteen year olds were attending one type of school or another, and today these percentages are probably even higher. It would, therefore, be quite feasible to provide 9 years of education for all children, 6 years in the mother tongue and 3 years in the second language.

3 The Structure of the System

47. The structure of the system of education has apparently been designed to allow each child who has completed the primary school to choose a type of further education in accordance with his interests and ability. The basic choice is between academic general education and practical training. Within general education there are three types of schools : VWO - a six-year course preparing students for a university education, HAVO - offering a five-year course of general education, and MAVO - which is less difficult and provides a three or four-year programme. Furthermore, each type of school offers, in principle, a range of subjects (VWO - 17, HAVO - 14, MAVO - 12) from which students may towards the end of the course select 6 for their final examination. Even though there are some restrictions (the Dutch language plus one out of four modern languages must be included in the package) this still leaves hundreds of possibilities.

48. Children who prefer a more practical type of education may choose between ETAO schools which offer a three or four-year course leading to employment in commerce, tourist trades or office work, lower technical schools (LTS) preparing boys for trades or employment in industry, and domestic science schools for girls (LHO). Within the LTS students may opt to follow a technical stream of three-years' duration, a "normal" two-year course where the time is equally divided between general and vocational education, and a practical stream also lasting two years. Schools for home economics offer two streams, a "normal" stream and a practical course.

49. Clearly, therefore, the number of possibilities both in general and in vocational education is so large that every child whatever his interest or ability can find a course that suits him best. At least, this is the theory. In practice, the children do not choose at all, they are selected by the teachers of secondary level schools. If they are found to be sufficiently intelligent they are admitted to VWO or HAVO schools, those who are of average ability may enter the MAVO ; and the others may find a place in a vocational school which, unfortunately, seldom leads to suitable employment.

50. The main point is, however, that a decision on the type of education a child is to follow after 6 years of primary schooling is made at too early a stage in his school career. Whether this decision is based upon a choice of the child (or his parents) or whether it is based on selection (whatever the methods of selection) makes little difference in this respect. Once the decision has been made on the type of school where a given child will be admitted, it is very difficult to change, notwithstanding the fact that the first year of secondary education is a "bridge" year offering much the same subjects in all schools. The very existence of a highly structured system at the lower secondary level forces children to "specialize" at an age which should be devoted to the development of all their potential skills and abilities.

51. At the upper secondary level the preparation of packages that may be presented by students for their school leaving diploma would seem to be somewhat excessive. Consider, for example the HAVO final examination which covers the following subjects :

- a) Dutch language and literature ;
- b) One of the following languages : English, Spanish, French, German ;
- c) Four subjects to be selected from the following : history, geography, mathematics, computer science, physics, chemistry, biology, economics, commercial science. The total number of combinations is 504. Is it really necessary to have 504 different kinds of HAVO diplomas in a relatively small community like the Netherlands Antilles ? From an economic point of view it would seem over generous, because inevitably the number of students taking a given subject will be small, and this makes the cost per student too high. Furthermore, a number of students will be tempted to choose a "soft" package which enables them to get the diploma but may be detrimental to their further study or their career. For example, primary school teachers who will have to teach arithmetic may regret not having included mathematics in their list of subjects for the HAVO diploma.

4 Curriculum and Textbooks

52. It has not been possible to collect any more than fragmentary data on what is actually learned and what textbooks are being used in schools of various types in the Netherlands Antilles. Brief visits to schools give the impression that on the whole teachers make an effort to adapt the curriculum to the situation in the Netherlands Antilles. In this connection mention should be made of the selective curriculum guide for primary education prepared by a commission of experts under the chairmanship of Professor F.W. Prins, Unesco consultant (1). One of the central themes of this work is that the curriculum should be adapted to the cultural background of the Antillian child, including of course his linguistic background : " textbooks should be in Papiamentu ".

53. Notwithstanding this plan, nearly all the textbooks are in Dutch, a large number have been prepared and printed in Holland, and sold in the Netherlands Antilles at about twice what they cost in Holland. Since every teacher, at least in secondary schools, is free to decide what textbooks will be used for his subjects, the number of different textbooks used is very considerable which may in part explain why textbooks cost so much. Although it is hazardous to express an opinion on the basis of a few examples, the textbooks produced in the Netherlands Antilles appear to be of good quality (2).

(1) Leerplan en Leidraad voor het basisonderwijs op de Beneden Windse Eilanden der Nederlandse Antillen, 2 vols, Dijkstra, Zeist (Netherlands), 1968 and 1970.

(2) Eg. Michiel Kok, De economische structuur van de Nederlandse Antillen, Curaçao, 1974.

5 Teacher-training

54. At present, teacher-training is limited to pre-service training which takes place in the "Pedagogical Academies of Aruba and Curaçao. Each Academy provides two courses, one for training Kindergarten teachers, and one for training primary school teachers.

The duration of the courses is three years but entrance to primary teacher training requires possession of the MAVO diploma whereas a MAVO diploma is sufficient for admission to the kindergarten teacher-training course.

55. The Pedagogical Academies give the impression of being somewhat theoretical, comparable to a Faculty of Arts rather than a professional training college. Students learn about the principles of pedagogy and psychology from books and from their teachers, but the problems of practical classroom teaching are dealt with through a system of tutoring whereby students spend some time in various schools under the guidance of kindergarten or primary school teachers. As a result, Antillian teachers have good academic qualifications, but little motivation. Furthermore, most Antillian teachers are very young, and thus inexperienced, since it is only recently that the Government started the training programme in an attempt to replace foreign teachers in kindergarten and primary schools. They would need some guidance from the school inspectors or members of the Pedagogical Didactical Bureau, but these officials are only indirectly or partly concerned with training and are not in any way associated with the Pedagogical Academies.

56. At the secondary school level, the majority of the teachers are still recruited from abroad, usually for a period of three years. These teachers are competent and experienced in the sense that they know how to teach their subject, but they do not always understand the learning problems of their Antillian students. It would seem preferable to train Antillian teachers using pre-service as well as in-service training methods.

6 Implications

57. It would appear that there are two main issues which divide opinion in the Netherlands Antilles, namely the use of the native language in primary schools and the structurization of second level education which is one of the principal characteristics of what is often called "the Dutch system". Teacher-training could be improved, the curriculum might be better adapted to the local situation, and textbooks prepared by Antillian educators are more suitable than those imported from Holland - but these are not really issues because no one would argue against changes of this sort. This is not to say that teacher training, curriculum development and textbook production are unimportant or irrelevant, but simply that following a decision on the main issues these could be changed without raising additional controversy.

58. The introduction of the native language as the medium of instruction in primary schools would certainly involve the re-training of teachers. Nearly all teachers know Papiamentu (in the Leeward Islands) or English (in the Windward Islands) but it is one thing to know a language and a different thing to teach in that language. Similarly, the curriculum of the primary schools would have to be changed, in order to make room for the teaching of the second language. Third, it would be necessary to prepare and produce textbooks in the native language for all subjects of the curriculum, at least as far as Papiamentu is concerned. It is not suggested that it would be easy to make these changes or that they could be made overnight.

59. Another implication of using the mother tongue as the language of instruction in primary schools is that all children at the lower secondary level of education would need to spend more time than at present on the study of the second language. This would particularly affect certain types of lower secondary education such as the schools for domestic science and the lower technical schools. However, the high degree of structurization of lower secondary education and the ineffectiveness of vocational training at this level would in any case call for some reform. It would not be inconceivable and indeed in conformity with modern trends in education that such a reform might lead to the establishment of one type of "comprehensive" lower secondary school for all children, with a large allocation of time to modern languages - in view of the geographical position of the Netherlands Antilles and its economic dependance on tourist trade and commerce - and practical (but non-vocational) training. The two main issues - using the native language in primary education, and the reform of lower secondary education - would seem to converge at this point.

60. In this Chapter the basic question, namely maintaining the present system of education or changing it, has been approached from the view point that the fundamental interest is in children. Specifically, it has been argued that the system may be good for those children who speak Dutch at home, but that it presents a severe handicap for the majority of Antillian children. This question will be taken up again in the last Chapter of the Report. Before doing so it would be well to look at the present system from an entirely different point of view, namely its relative efficiency. This will be the subject of the next Chapter.

CHAPTER IV - COST ANALYSIS AND EFFICIENCY

1 Total Cost of Education

61. In 1966, the total outlay for education was NAf 29 million, representing 7.4 percent of G.N.P. More recent data on current educational expenditure are not available except for Curaçao and the Central Government. However, a rough estimate can be made on the basis of the 1976 budget for Curaçao and enrolments in the other islands. The assumptions on which this estimate is based, are, first, that unit cost in the other islands as well as the proportion of administrative overhead costs are the same as in Curaçao and, second, that enrolments in the other islands have not greatly changed since 1972, which is the most recent year for which complete enrolment data are available. To the extent that these assumptions are valid, total estimated expenditure for 1976 would be of the order of NAf 79 million.

62. For purposes of comparison with other countries it would be interesting to know what percentage of G.N.P. this represents. In 1972, G.N.P. was estimated at NAf 632 million, but more recent data are not available. However, in view of the considerable increase in the cost of education during the past few years, it is likely that the percentage of G.N.P. spent on education is higher than in 1968, probably 8 percent or even more.

63. The table below shows educational expenditure as a percentage of G.N.P. and as a percentage of total Government expenditure for a selected number of countries.

Country	Year	Education expenditure as % of G.N.P	Education expenditure as % of total Govt. expenditure
Barbados	1972	7.9	20.9
Dominican Republic	1972	2.6	13.9
France	1972	3.6	19.3
Germany, Federal Republic of	1972	4.0	13.2
Jamaica	1972	5.7	19.3
Netherlands	1971	7.9	26.1
Netherl. Antilles	1976	8 (1)	39 (2)
Panama	1972	6	26.4
United States	1972	6.5	-
Venezuela	1971	5.4	20.6

Source : Unesco statistical yearbook

(1) Mission estimate

(2) Curaçao only

The total unweighted world average percentage of G.N.P. allocated to education was less than 6 percent in 1972. On the basis of these data it would seem that the cost of education in the Netherlands Antilles is somewhat on the high side, as compared to most other countries.

64. However, it will be useful to enquire whether the cost of education can be reduced assuming (a) that both the quantity and the quality of the educational services that are at present provided will be maintained, or (b) that some services can be reduced or discontinued because they do not yield the desired results. Under the first assumption, some indication of possible cost reduction might be obtained through an analysis of unit cost of type and level of education, and per teacher, as well as by an examination of the cost of "wastage" (repetition of grades and dropping out). Under the second assumption only vocational education can at present be examined because in the absence of clearly formulated objectives it is not possible to say whether or not a given type of general education produces the desired results.

2 Unit Cost by Type and Level of Education

65. The estimated cost per pupil per year by types and levels of education in Curaçao is shown in Annex 27. The data show that second level education is more costly than primary education, and this is not unusual. One would have expected, however, that the unit cost of technical education at the upper secondary level would be rather higher than that of general secondary education, but this is not the case. The main reason is that class-sizes in HAVO-VWO are smaller than in the MTS. The following table shows the number of pupils per teacher as well as the unit cost.

	Unit cost Curaçao budget 1976 NAf	Pupil/teacher ratio Curaçao 1971/72
Pre-primary	457	32
Primary	759	29
HAVO	1,415	25
HAVO/VWO	2,511	14
Special education	2,271	13
Lower vocational	1,835	19
MTS	2,660	20

It will be seen that HAVO/VWO is particularly expensive in relation to other types and levels of education, and that one of the factors contributing to this high cost is the low pupil/teacher ratio.

66. The unit cost of post-secondary education is more difficult to estimate. The Pedagogical Academy has an enrolment of about 340 and the budget for 1976 is one million NAf, which should give a unit cost of NAf 2,941. The Institute of Higher Education, with 65 students cost NAf 675,000 in 1975 but is budgeted at NAf 320,000 for 1976. The unit cost would be approximately NAf 5,000 but

may be higher. The Higher Technical School has 112 students and the cost was estimated at NAf 500,000 for 1975 but NAf 725,000 in 1976. The unit cost would, therefore, be between NAf 5,000 and NAf 6,000, or about the same level as that for the Institute of Higher Education, which is surprising because technical education at this level requires more equipment, laboratories, etc. Again, the very small number of students at the Institute might be the explanation.

67. In addition, provision is made for Antillians to study abroad, in particular in the Netherlands. The Central Government has set aside NAf 2,750,000 for this purpose, and the Island Government of Curaçao has included an account of NAf 1,160,000 "for the promotion of study outside the Netherlands Antilles". The number of students abroad, by field of study and source of financing used to be stated in the Annual Report of the Department of Education. The latest report available is a draft report for 1973, and at that time the number of students abroad financed by the Netherlands Antilles was 426. Since study grants cover not only the cost of study and maintenance but also travel and an installation allowance the unit cost may well be higher than study in the Netherlands Antilles.

3 Unit Cost per Teacher

68. As in all countries, the bulk of educational expenditure consists of staff cost. In Curaçao, the proportion of the budget allocated for teaching staff cost is about 88 percent. The remaining 12 percent covers administrative costs, transport of children, school meals, maintenance of building and provision for textbooks, furniture and equipment. It follows that major economies can only be made by reducing staff cost. This consists of three main components, namely salaries, other staff costs such as pension fund contributions and, in the case of foreign staff, the cost of travel on recruitment, repatriation and home leave, and installation allowances.

69. There are 40 different salary scales for teachers in Curaçao. Which of these is applicable depends on :

- a) the level of education (pre-primary, primary, lower secondary or full secondary) but not the type of education (general or vocational/technical). The scales for teachers in special schools for physically handicapped or retarded children correspond to those for teachers at lower-secondary schools,
- b) the academic qualifications of the teacher. Teachers may increase their income by obtaining additional diplomas, e.g. for teaching English or Spanish,
- c) the functions in the school, namely, teacher or headmaster.

70. The current basic salary scales were determined by the Island Government of Curaçao in 1969, but have since then been revised a number of times following increases in the household consumption price index. The scales set out below are those applicable to "fully qualified", married teachers (a) in 1973 and (b) in 1975. Single teachers earn about 20 percent less.

Monthly Salaries of Teachers

Level of School	(a) 1973		(b) 1975	
	NAf	US \$	NAf	US \$
Pre-primary (Scale 3)	715 - 1,145	404 - 647	1,005 - 1,575	568 - 890
Primary (Scale 13)	995 - 1,435	562 - 811	1,375 - 1,950	777 - 1,102
Lower Second- ary (Scale 29)	1,045 - 1,495	590 - 845	1,440 - 2,030	814 - 1,147
Full Seconda- ry (Scale 36)	1,375 - 1,965	777 - 1,110	1,870 - 2,620	1,056 - 1,480

Source : Afkondigingsblad Curaçao

It will be noted that the increase during the period 1973 - 1975 was about 40 percent.

71. Although comparisons with other countries are not meaningful without considering national living standards, it may, nevertheless, be of interest to show salary ranges in other countries, as is done below. The interest is that teachers from nearby countries would be attracted by the higher salaries in Curaçao.

Monthly Salaries of Teachers (in US \$ equivalent)

Level	Countries			
	Guyana 1972	Barbados 1972	Dominican Republic 1973	Curaçao 1973
Qualified primary teacher	84 - 157	188 - 325	148 - 209	562 - 811
Qualified secondary teacher	194 - 264	325 - 513	150 - 200	777 - 1,110

Source : Unesco Mission Reports.

72. Annex 28 shows data on teachers' salaries and their relations to G.N.P. (or G.D.P.) for a cross section of 20 countries in different parts of the world (Africa, Asia, Latin America and Europe). It will be noted that in

absolute terms, teachers in Curaçao, both primary and secondary, are at the top of the list. They earn more than colleagues in the Federal Republic of Germany.

73. The total average cost per teacher is higher than the average salary shown in the table above, because of pension fund contributions and other staff costs, as follows :

	Average annual cost per teacher NAf	Average annual salary NAf
Pre-primary	15,497	16,080
Primary	22,558	19,950
MAVO	33,216	20,820
Special education	23,686	20,820
HAVO/VWO	38,484	26,940
Lower technical	23,292	20,820

It will be noted that the difference between average annual cost and base salary is particularly high with respect to MAVO and HAVO/VWO teachers. Since most of the teachers in this category are expatriate teachers (see Annex 20), the actual cost is even higher than indicated in the table above. It is difficult to estimate how much higher, but the total estimated extra cost of expatriate teachers working in Curaçao (travel on recruitment and repatriation, etc.) is estimated at NAf 1.8 million for 1976, which represents about 3 percent of the total wage bill for teaching staff.

4 Wastage

74. Another factor that affects the cost of education is the high rate of repetition (around 20 percent) in schools of all types. The problem has been regarded with concern by educators in the Netherlands Antilles and has been analysed extensively, but not from the point of view of efficiency. For example, Mrs. A.C. Prins Winkel (1) found that children whose home language is Dutch, repeat grades relatively less often than those whose mother tongue is Papiamentu. Another study published by the Department of Education (2) shows that schools in poor neighbourhoods have a higher repetition ratio than those attended by children from middle and upper class families.

75. However, if the interest is in efficiency it is also necessary to study the effects (and not only the causes) of non-promotion of children from one

(1) Kabes Duru, Amsterdam, 1973.

(2) Informatieblad nr 8, Curaçao, October 1974.

grade to the next higher grade. These effects are of two kinds, namely psychological and financial. Of these, the psychological effects seem to be fairly well established : a child who is forced to repeat a grade usually finds no particular encouragement in the fact that he has to follow the same lessons for another year with a group of children younger than himself. Repetition does not help, as witnesses the fact that children repeating one grade in say, a primary school, are likely to repeat another grade a few years later and may even drop out altogether as soon as they can (1).

76. As regards the financial consequences, consider, for example, the data shown in Annex 11 : " Primary education, age-grade distribution, 1972 ", and more particularly the age group 7-12. The relevant numbers are represented below :

Age	Enrolled in primary schools
7	5,196
8	5,546
9	5,604
10	5,661
11	5,522
12	4,519
Age group 7-12	<hr/> 32,048

One could expect the total population of the six-grade primary school to be approximately (2) 32,048. However, in reality, the number of children enrolled was 41,294. The difference of 9,246 represents the number of children who

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- (1) The following extract from a recent article on education in France by Yves Agnès (Le Monde, 6 Avril 1976) is an example of current opinion on non-promotion. The failure rate in primary schools in France runs from 9.6 to 14.8 percent.

"These figures are absurd and scandalous. Absurd, because children may suffer for the rest of their lives as a consequence of their failure in primary school. Failure of the child, but failure of the teacher also, despite the fact that because of an overloaded curriculum and inadequate teacher training it is really the whole system that is to blame. Scandalous, because there is no reason why a child who at age seven cannot read properly should not be allowed to continue his studies, under the guidance of teachers whose responsibility it is to help him catch up with the other children ; and also because repetition of grades entails unnecessary expenditure".

- (2) "Approximately", because children enter school when they are 6 years old before 1 October and the census was taken in January. One should therefore consider the age group 6 (3) - 11 (3) instead of 7 (0) - 12 (0), as is done here, but the difference is likely to be small.

are one or more years too old to be in the primary schools, as the direct result of repetition of one or more grades.

77. The cost of repetition may be evaluated in terms of unit cost, i.e. average expenditure per pupil per year. Thus, if the unit cost was 500 Naf in 1972, then $9,246 \times 500$ Naf or approximately 4.6 million Naf were spent in excess of what would have been spent if there had been no repetition of grades. Alternatively, the cost of repetition might be expressed as a percentage of total expenditure. In this case, total expenditure for primary education under conditions of non-repetition would have been some 20 percent less, than the amount actually spent (1).

78. A similar result is found by inspection of the grade VI enrolment ; the age distribution of children in grade VI was as follows (1972) :

Age	10	11	12	13	14+	All ages
Number of children	26	1,074	1,700	1,597	1,174	5,571

Those children who had not repeated any grade should, in January 1972, not be older than 12 years and 3 months, those who repeated one grade should be between 12 (3) and 13 (3) and so forth. Thus, of the 1,700 children who were reported to be 12 years old in January 1972 (i.e. between 12 (0) and 12 (12), some 25 percent (those between 12 (0) and 12 (3) had not repeated and 75 percent had repeated one grade). Similarly, 25 percent of the 1,597 children who were 13 years old in January 1972 had repeated one grade and 75 percent had repeated two grades. By making these calculations one can estimate how many pupils in grade VI have not repeated at all, how many have repeated once, twice or more. Supposing now that all children enrolled in grade VI in January 1972 would leave school at the end of the school year (which is a somewhat optimistic assumption because some will repeat grade VI), the number of pupil/years provided for the grade VI enrolment may be estimated as follows : those who never repeated any one grade will have spent 6 years at school, those who repeated once will have spent 7 years and so forth. The results of these calculations are shown in the table below :

(1) Number of years in primary	(2) Number of pupils	(3) Per thousand	(4) Number of pupil/ years provided per thousand (col. 1 x col. 3)
6	1,525	274	1,644
7	1,674	300	2,100
8	1,492	268	2,144
9+	880	158	1,422
Total	5,571	1,000	7,310

(1) Provided there is no change in the proportion of drop-outs.

The number of pupil/years that would normally be provided for 1,000 children (i.e. if there were no repetition of grades) would obviously be 6,000, i.e. 82 percent of the 7,310 pupil/years actually provided (1).

79. For second level education it is much more difficult to estimate repetition of grades, because students at this level may transfer from one type of school to another. The only data available are from individual schools as collected by the mission. These data show that repetition of grades varies from 30 percent to less than 10 percent.

5 Summing up

80. The current expenditure for education in the Netherlands Antilles represents about 8 percent of G.N.P. The island of Curaçao spends 40 percent of its annual budget on pre-primary, primary and second level education alone. These statistics indicate that the Netherlands Antilles spend relatively more on education than most other countries in the world.

81. Among the factors that contribute to the high cost of education, the following have been identified :

a) the salaries of teaching staff in primary and secondary education are high in absolute terms, and very high in terms of national income per capita. The actual cost per teacher per year is particularly high for general secondary (HAVO/VWO) school teachers (NAf 38,500 or US \$ 21,400). In the case of expatriate teachers, who represent 61 percent of the total teaching staff at this level, the cost of travel on recruitment and repatriation, plus an installation allowance, should be added to this amount.

b) the cost per student per year would seem to be somewhat excessive in HAVO/VWO and the Institute of Higher Education. This is not only due to staff cost but also to the fact that the average number of students per teacher is very low (14 in HAVO/VWO).

c) Widespread repetition of grades results in a situation where the number of pupil/years actually provided is about 20 percent in excess of normal requirements. In other words, the cost of repetition is approximately 20 percent of total annual recurrent expenditure.

(1) The table above shows another interesting feature, namely that the average duration of primary schooling is 7.3 years, as distinct from the official 6 years.

CHAPTER V - TENTATIVE SUGGESTIONS FOR FURTHER DEVELOPMENT

1 The need for further development

82. Since the Netherlands Antilles took over responsibility for education, in 1954, the Government has spared no effort to develop and expand its educational services at all levels of education. Very considerable progress has been made as witnesses, for example, the fact that nearly all children receive a basic education and the vast majority of children are able to continue their education beyond the primary level. Quite naturally a number of problems and issues have arisen over the years. Some of these have been solved or are in the process of being solved, such as the gradual replacement of Dutch teachers by Antillian teachers, whilst others are still pending. The present Report, which is prepared at the request of the Government, deals with those problems that still require a solution and issues that need to be settled. The critical analysis contained in the preceding chapter of the Report, should not, however, obscure the very significant progress made over the past 20 years.

83. The Report would fall far short of the Government's expectations if it were limited to a formulation of problems and issues. The Government has made it abundantly clear that what they expect is, above all, concrete suggestions for the further improvement and development of its education services. In fact, the main purpose of the Report is not to say what, if anything, is wrong with the present system, but how and in what direction it might develop in the near future. The tentative suggestions set out in the following paragraph are an attempt to comply with this request. They are based on the views expressed by government officials and others who are directly or indirectly responsible for education in the Netherlands Antilles, and also on the experience gained by Unesco in other countries.

2 Educational reform : legislation or projects ?

84. Since the Government is in principle prepared to consider modifications of the present system of educational services, the question as to how to proceed may be raised as a preliminary issue. Traditionally, all changes, large and small, have been decided by legislation. The classical example is the so-called Mammoth-Law first adopted in the Netherlands and subsequently by the Government of the Netherlands Antilles, whereby the structure and the curriculum of all second-level education have been reformed. Reform through legislation has the merit of ensuring uniformity, but it also carries a number of disadvantages. To begin with, by its very nature a law is imposed, and prior consultation with School Boards, Teachers' Unions and parents notwithstanding, there will always be a minority of parents and teachers who feel they are forced to accept its provisions whether they like it or not, and who will thus be inclined to give something less than full cooperation. Secondly, even the most brilliant legislator cannot foresee all the practical difficulties that may crop up in the course of implementation of a new law and thus, the transformation of one type of school into another (such as the conversion of MULO's (1) into MAVO's), or the introduction of new subjects in the curriculum, may create problems with respect to learning materials, retraining of teachers, utilization of available space and so forth, which are simply unpredictable. Similarly, the financial implications of legisla-

(1) Primary extension schools.

tion which purports the creation of new types of schools are difficult to estimate. In the third place, legislation cannot, by virtue of its general applicability, take into consideration the particular situation of the different islands that constitute the Netherlands Antilles. What is desirable in one island may be quite unworkable in another. And even within a given island, it may be easy for one school or type of school to comply with a new law whereas for others it would involve considerable expenditure and effort.

85. However, prior large-scale legislation is not the only way in which changes in the education system can be brought about. In fact, most countries follow a more pragmatic approach which consists of the selection and elaboration of concrete projects. By "project" is meant a detailed plan for the establishment of one or more schools of a given type, or the introduction of another language as the medium of instruction, or a change in the curriculum, and so forth. Each project must include a justification in terms of overall policy or development priorities or whatever criteria are established by the Government; a specification of activities to be undertaken and their detailed costing; and a statement concerning the results to be achieved. Thus, a project to establish say, a comprehensive type of school should include inter alia, the reasons why such a school is necessary, a specification of the buildings and equipment required and costed item by item, the number of students and from which level of education they could be recruited, the curriculum, the likely benefit of this type of education to the students, staff requirements and recurrent expenditure. Usually, the elaboration of projects of this sort requires several specialists including an educator, an economist and an architect working together for several weeks.

86. Planning by projects has been introduced in a number of countries in connection with requests for external aid. But essentially it makes no difference whether the source of financing is external or internal. In either case, the project method has the merit of being a step-by-step method which permits at any time to check whether development is rational (i.e. in line with government objectives and policies) and whether it is feasible (i.e. whether the Government can afford it in terms of human and financial resources). In short, it is a more realistic procedure for development than reform by legislation.

3 Projects and policy

87. A number of projects have been identified as making a contribution towards the further development of education. Some of these have been listed in the preceding chapters of the Report, namely:

- administrative reform (more centralization or more decentralization);
- establishment of a central statistical service;
- introduction of English in the Windward Islands and Papiamentu in the Leeward Islands as the medium of instruction in primary schools;
- production of textbooks adapted to the culture of the Netherlands Antilles;
- reduction of wastage;

But this list is not exhaustive; it would not be difficult to identify other suitable projects.

88. As it is clearly impossible for any government to do all the things it wants to do within a given period of time - such as the life-span of the government - decisions will have to be made on priorities. In some countries, decisions of this sort are taken in the light of criteria derived from a more or less articulate educational policy. In the Netherlands Antilles the policy has been until now to follow the Dutch system of education but, as has been shown in the preceding chapters, it is precisely this policy which has led to unsatisfactory results for large numbers of children and it would, therefore, hardly be logical to suggest that priority should be given to projects or programmes designed to ensure that the development of education in the Netherlands Antilles should proceed in harmony with developments in Holland. In good logic the Netherlands Antilles should formulate policy of its own as advocated, for example, by the Teachers' Unions, and then in the light of this policy decide what reforms ought to be introduced in the long-term and what changes should be made in the short-term (i.e. on a priority basis). In practice, however, the formulation of such an authentic policy would take a long time, given the differences of views and opinions prevailing in the six islands and the desire of all parties to achieve agreement in a democratic fashion ; but meanwhile the situation would be likely to deteriorate. Nor is it certain from the outset that the translation of educational policy into concrete action would be a simple matter.

89. To escape from the dilemma that policy should precede action and action should be taken before a policy can be formulated it is here suggested that as a starting point or as a basis for discussion it would be plausible to make a limited number of changes in the system of education, on a priority basis, in the light of two criteria that would appear to be acceptable in most countries, namely efficiency and equity. The notion of efficiency will need little elaboration. The Government (that is to say the Central Government and the Island Governments) devote considerable resources to education, and it is in the interest of all that these resources should be spent wisely, they should not be wasted and, more positively, benefits should be maximized.

90. The concept of ' equity ' (1), as used here, refers to the distribution of educational services. The Government, as the sole supplier of these educational services, is naturally concerned that they be distributed in an equitable manner to all children and young people, regardless of their mother tongue, ethnic origin, religion or the island where they live. All children should derive some benefit from education, although not necessarily the same benefit ; some will receive basic education only and others will be enabled to pursue their study and training at higher levels. But, to take an extreme example - which, incidentally does not apply to the Netherlands Antilles - a distribution whereby some children should derive enormous benefits whilst others are deprived of education, could hardly be considered as equitable. All children should have, at least, a fair start in life.

(1) " 'Equity' is a term widely used in ethics, law, and jurisprudence, with connotations that suggest or involve ideals of justice, fairness, equality, mercy, judgment according to law, as well as judgment that bypasses or transcends strict law in the interest of conscience, humanity, natural law or natural justice (as distinguished from justice according to law) : judgment according to the spirit, rather than the letter, of the law ". Dictionary of the History of Ideas, New-York, 1973. See also : J.A. Smyth, Equity criteria in educational Planning, in : Educational development - some practical issues, Unesco, 1975.

91. If equity and efficiency are acceptable as criteria for determining priority areas for development, then attention should focus in the first instance on education for the age-group 4-15, not merely because this is by far the largest group receiving education but also because all young people should at age 15 have acquired sufficient knowledge and skills either to continue their studies or to enter the world of work. For easy reference, the discussion will follow the existing structure of pre-primary, primary and lower secondary education.

4 Kindergarten

92. An estimated 80 percent of children receive two years of reasonably good pre-primary education and for the remaining 20 percent there are no places available or the parents cannot afford to pay the very modest contribution levied by the school boards. It would seem that as a matter of equity this type of education should be provided by the Government for all children in the age-group 4-5. Furthermore, the present situation is unsatisfactory from an efficiency point of view, because in grade I of the primary school the minority of children that have not had the benefit of kindergarten education will slow the pace of those who did receive this type of education.

93. The recurrent cost of extending pre-primary education to all children in the age-group 4-5 should not be prohibitive. In 1972, the total number of children in the relevant age-group was 9,926 and it is probably less in 1976, as a result of the decline in the birth rate. The number of children not in school is of the order of 2,000 at the most. Taking as a basis the estimated recurrent cost of NAf 457 per pupil per year, the total increase in the budget would be NAf 914,000. This represents just over one percent of the total annual education budget of the Netherlands Antilles.

94. In addition it will no doubt be necessary to build a number of new schools, and to replace the unsuitable rented buildings in which some Kindergarten schools are housed at the present time. Furthermore, it would be essential for this type of education to provide adequate furniture, some basic equipment and a good supply of teaching materials. The total cost of construction and equipment cannot be estimated at the time of writing the present Report, for lack of data on the number of schools required, their location and the cost of construction per school.

5 Primary Education

95. Because of the high rate of repetition (about 20 percent per grade) this level of education must be considered as inefficient, entailing unnecessary high expenditure and having ill effects upon children (1). Further, it is unrealistic to assume that children whose mother tongue is not Dutch can complete the Dutch primary schools programme in the same span of time as Dutch children. For reasons of both equity and efficiency it would seem necessary to introduce the mother tongue as the medium of instruction throughout this level of education.

(1) For a general discussion of the effects of repetition see Recommendation n° 66, of the International Conference on Education, 32nd session concerning the improved effectiveness of educational systems, particularly through reductions of wastage at all levels of education, Unesco document EP/MD/13, Paris 1970.

96. The introduction of Papiamentu as the language of instruction in primary schools in the Leeward Islands would involve additional expenditure, at least temporarily, in connection with the production of textbooks and the re-training of teachers. However, this extra expenditure would be more than offset by increased efficiency of the primary schools. If the present large scale repetition is caused by the fact that children have to follow instruction in a foreign language, one might assume that repetition will be abolished, or at least drastically reduced if instruction were to be provided in the mother tongue. If children were to be normally promoted to the next higher grade, the efficiency would be increased because all children would receive 6 years of primary education, whereas at present a number of them drop out before reaching grade VI. Further, the total number of children attending primary education would probably be some 10 to 15 percent less, notwithstanding the fact that no children would leave school before grade VI and this may reduce the cost of primary education.

97. It should be noted, however, that a decrease in enrolment does not appear automatically to lead to a reduction in cost. Thus, during the period 1971 to 1975 total primary school enrolment decreased from over 43,000 to 38,600, but paradoxically the number of primary teachers rose from 1,316 to 1,528 during the same period. No satisfactory explanation appears to be available, and this again points to the need for an adequately staffed central statistical and financial service.

6. Lower Secondary Education

98. The children who survive the annual selection process that takes place in the primary school face a new and more formidable barrier when they seek admission to some form of secondary education. Those who have good command of the Dutch language and elementary arithmetic may be admitted to schools for full secondary education (HAVO - VWO) ; those whose performance in these subjects is average may proceed to schools for lower general secondary education (MAVO or ETAO) and the others may find a place in schools for lower vocational education, namely, the LTS for boys or domestic science (EHO) for girls. This selection process is hardly fair on a number of children, for the following reasons :

- the selection process takes place too early, namely throughout and at the end of the primary school ;
- the criteria for selection, and in particular performance in the Dutch language and school intelligence tests are such that they favour one group of children ;
- children who channelled into lower vocational education do not have a fair start in life because they are virtually unemployable upon completion of the course.

99. From the equity point of view, the ideal solution would be for all children in the age-group concerned to follow a course of education that will permit them, at the end of the period, either to enter the world of work or to continue learning in a school. Such a course of education should be neither "vocational" (in the sense of training for manual occupations) nor "general" (in the sense of academic) but eminently "practical", that is to say designed to prepare young people for life and work in the Netherlands Antilles. This will no doubt involve the learning of one or more modern languages, as well as

the development of certain technical skills whether these are to be used in later employment or in leisure time (1).

100. It will be evident that this solution cannot be applied at short notice because it implies rather fundamental changes in curricula, method, the approach of teachers to the learning process and indeed a view of what education is all about which is quite different from current opinion. But this does not mean that nothing can be done short of what is ideal. In fact, a practical step in the direction of the integration of second-level education is being made in Bonaire where schools for "general" and "vocational" education (MAVO-ETAO, EHO and LTS) have been brought together on one campus. Similar combinations could no doubt be made elsewhere, or it may be possible to use the facilities of an existing LTS as a central workshop for a number of MAVO's.

101. Special attention should be given to the children in the smallest islands, Saba and St Eustatius. At present, children go to other islands for education beyond the primary level provided they have relatives with whom they can stay. As regards lower secondary education one might consider two possibilities, namely the establishment of schools at this level in each of these two islands or to provide boarding facilities for these children in one of the other islands. The first solution would probably be less costly, and desirable from an educational point of view.

7 Vocational Education

102. Vocational education at the lower secondary level (LTS) is not very efficient because many students who completed the course are unable to find suitable employment. Some employers even go so far as to say that they are unemployable. This is not surprising. Experience in many countries has shown that vocational training at this level is rarely efficient. A good deal of general basic knowledge such as ability to read instructions and elementary mathematics are required before the training in technical skills can even start, and six years of primary education does not provide this general background. To teach these general subjects in a vocational school is a palliative, because it does not leave enough time for practical training. It is also expensive because vocational schools are by the nature of things more costly than general schools. Therefore, on the basis of efficiency criteria alone there would be an advantage to provide vocational training after 8 or 9 years of general education. In the system of the Netherlands Antilles this would mean in practice that the LTS should be entered after MAVO instead of being a substitute for MAVO.

103. Education in the MTS (with intake from MAVO) is considered suitable by employers for the preparation of technicians. Industrial enterprises are convinced that there will continue to be a considerable demand for practical technicians and there would thus seem to be room for additional schools of this type. However, the curricula in the MTS's need not be limited to engineering fields, but might cover a broader range of specialities. Even within the field of engineering the curriculum is restricted to traditional subjects such as mechanical engineering, electrical engineering and civil engineering.

(1) Cf. " Revised recommendation concerning technical and vocational education " adopted by the general Conference of Unesco, Paris, 1974.

104. There exists, for example, an obvious need for maintenance technicians. There are more than 32,000 motor vehicles in Curaçao but at present there are no adequate courses for the training of auto-mechanics. Car owners therefore have problems in obtaining proper servicing for their cars. Lack of an efficient maintenance system constitutes a considerable wastage in this part of the national economy ; conversely, such a service would be very labour intensive and thus supply employment for many graduates from the technical schools. Therefore, a realistic step to take would be to train such automechanics.

105. In general, maintenance technicians are required in nearly all industries. At present, many companies are forced to recruit these technicians from abroad because there is no adequate supply in the islands. The training of maintenance technicians is probably one area where it can be said with near certainty that graduates will find suitable employment in the profession for which they have been trained.

106. For most occupations, however, it is difficult to estimate future requirements. Vocational and technical education courses at the upper secondary level should, therefore, be flexible. Rapid technological development requires job mobility and adaptation and full-time courses for occupational preparation should therefore be short and intensive. School leavers should have received such an education as enables them to re-train and adapt themselves quickly to rapidly changing economic situations. It might also be argued that all school leavers from upper secondary education should, in theory at least, be employable upon completion of their course. At present only the MTS graduates can be considered ready for employment.

107. It is too early to make a sound judgement on the recently established HTS. Some discussions have already taken place on the pros and cons of this institute. The high cost and the high drop-out rate were critically examined. It should also be said here that similar institutions in other countries are undergoing an upgrading process and becoming technical universities, especially if the courses are of a four-year duration. It would seem, therefore, that this course should only be a two-year one, similar to junior colleges. This would be more economical and under such programmes the institute could provide training for a much larger group of school leavers from the HAVO's, who may at present find no other outlet. Consequently, the programmes offered should be of a greater variety to serve more economic branches.

8 Conclusions

108. In conclusion, it is suggested that the government may wish to give priority to the further development of pre-primary, primary and lower secondary education. This would involve some limited expansion of kindergarten and lower primary education, and improvement of the quality of education for all children in the age-group 4-15.

109. This proposal is based on the assumption that the Government's future educational policy will include two basic objectives namely the equitable distribution of resources for education and their efficient utilization. The notion of " equity " implies that all children - and not only those whose mother tongue is Dutch - should have a fair start in life. From the view point of efficiency it would seem essential to improve the base before expanding upper secondary or higher education.

110. A number of issues remain to be settled, including the language question, the structure of the system, and the content of education. It is suggested that the Government may wish to elaborate an authentic policy based on the cultural, local and economic development needs of the Netherlands Antilles, and then discuss and settle these issues in the light of this new policy. However, the formulation of a policy should not preclude action with respect to the development of basic education for the age-group 4-15.

111. The development of education and the formulation of an authentic Antillian policy require that a number of decisions be taken. At present, administrative responsibility is divided in such a way that it is difficult to take any decisions, and the absence of up-to-date statistical data further impedes the decision-making process. A reform of the administrative machinery would, therefore, be a pre-requisite for the success of any proposals for educational development.

APPENDIX: SUMMARY DESCRIPTION OF THE SYSTEM OF EDUCATION

Administration and organization

1. Some 90 per cent of all schools at the primary and secondary level are private schools administered by school boards. Members of the board are elected by the Association of Parents whose children attend a particular school. The school boards appoint the teachers, decide upon the admission of students, provide and/or prescribe the text books and other learning materials, and ensure the maintenance of the buildings. In terms of the law they are recognized as the "competent educational authority" with respect to their schools. Although these schools are "private" in the sense of not being administered by public authorities, all expenditure is reimbursed (or advanced) from public funds, provided by the Government of the island where they are located.
2. The Island Governments administer the other 20 per cent or so of primary and secondary schools in their respective territories. They delegate this responsibility to a Commissioner for Education. In the larger Islands (Aruba and Curaçao) the Commissioner is assisted in this task by a Department of Education. The main functions of these departments are the preparation of annual budgets covering both public and private schools, and expenditure control.
3. The Central Government administers and finances institutions, courses and study grants at the post-secondary level of education. In addition the Government, and more specifically the Minister of Education, is responsible for the formulation and application of general policy and legislation concerning all education in all the islands. The Minister is head of the Central Government Department of Education, with offices in Curaçao and Aruba. In each of these islands there are thus two Education Departments, an Island Department and a Central Government Department. The organization of the Central Government Department of Education is shown on page x.
4. The influence of the Central Government Department of Education rests primarily on legislative action. There exists a considerable body of laws, rules, regulations and decisions governing the system of education. Thus, the number of subjects to be taught in each grade of each type and level of school, and the number of weekly periods to be devoted to each of these subjects are prescribed for all schools, public as well as private. Again, the methods of selecting children for admission to second-level education and the organization of final examinations are all determined in great detail by decisions of the Central Government. The national Department of Education ensures, through its inspectorate, that schools abide by the laws, rules and regulations, most of which are initiated by the Department itself.
5. The administration of the system is thus characterized by two somewhat contradictory conceptions. On the one hand, there exists great freedom and a high degree of decentralization: "freedom" in the sense that any group of parents can at public expense establish and maintain a school staffed by teachers whose religious or philosophical views conform to their own; and "decentralized" in the sense that administrative responsibility is delegated to the Islands and to the boards of private schools. But on the other hand, the system is highly centralized because through its legislative action the Central Government alone can decide what is to be taught, and how students are allowed to move through the system.

Pre-primary, primary and special education

6. Most children in the relevant age group (4 - 5 years of age) attend kindergarten schools. There is a considerable demand for this type of education, especially in poorer neighbourhoods where most of the mothers have to earn a living. The curriculum aims at child development but is also designed to prepare children for primary education, notably by teaching them how to speak Dutch.

7. Primary education is not compulsory. It has been asserted that there is no need to make it compulsory because the vast majority (99 per cent according to a recent Government publication) attend school anyway. This high attendance ratio is probably based on an optical illusion. The number of children enrolled in the six-grade primary schools is indeed around 100 per cent of the number of children in the age group 6 - 12. However, as a result of high repetition rates (about 20 per cent per grade) a fairly large number of children enrolled in primary schools are 13 years old and over, and a corresponding number of children in the age group 6 - 12 are, therefore, not attending school. In fact (see Annex 7) it would seem that less than 90 per cent of the children are enrolled.

8. The curriculum is about the same as in Holland and the language of instruction is Dutch. This is a foreign language for the 85 per cent of the children whose mother tongue is Papiamentu (in the Leeward Islands) or English (in the Windward Islands). According to a recent enquiry, the use of a foreign language as the medium of instruction is one of the main causes of the high rate of repetition. However that may be, there are certainly other and more valid reasons for using the mother tongue, at least in the primary school. One reason why this has not been done already is that it is apparently impossible to use Papiamentu at the secondary level because of its limited vocabulary.

9. About two thirds of the teaching staff are of Antillian origin, and the others have been recruited from the Netherlands and from Surinam, usually on short-term contracts. The maximum class size is 34, and primary schools may employ six teachers as long as the number of pupils enrolled is 201 or more.

10. In Aruba and Curaçao a number of schools have been established for physically or mentally handicapped children. During 1971/72 enrolment at these schools was 1,300 (i.e. 3.4 per cent of primary enrolment).

Second level education (general)

11. Upon completion of the sixth grade of the primary school children may be admitted to one of several types of schools offering general or vocational education, as shown on page xiii (Structure of the system of Education). The curriculum of the first year of second level education is, however, the same for all types of schools, as follows:

Subject	Weekly periods per subject
Dutch language	5
Spanish language	3
English language	3
History	2
Geography	2
Mathematics	4
Biology	2
Music	}
Drawing	
Handicrafts	
Physical training	2
Free study	3

This first year of secondary education is called "bridge year".

Theoretically, children may transfer to any other secondary school after the first year, but in practice they move from more difficult to less difficult schools and seldom vice versa.

12. "Voorbereidend wetenschappelijk onderwijs" (VWO) - preparatory higher education - consists of a six-year programme. In addition to the subjects listed above, schools of this type offer civics, physics, chemistry, and they may also offer French, German, Latin and Greek. The final examination covers six subjects only, namely Dutch, one foreign language and 4 other subjects selected by the students from the list of subjects taught at their school.

13. "Hoger algemeen vormend onderwijs" (HAVO) - higher general secondary education - offers much the same programme but less intensively. The duration of the course is 5 years, and students have the same options as at VWO. In practice, HAVO and VMO schools are combined; there are four such schools, three in Curaçao and one in Aruba.

14. "Kiddelbaar algemeen vormend onderwijs" (MAVO) - middle general secondary education - consists of a 3 or 4 years course. The curriculum is a simplified version of that offered by HAVO - VWO. For example, students may take one foreign language (English or Spanish) in addition to Dutch. The final examination includes 5 subjects. In 1971-72 the number of MAVO schools was 31, of which 21 were private schools.

15. Admission to second-level schools is decided by the "competent authority" which operates a given school, i.e. the Island Governments for "public" schools and the school boards for "private" schools. The competent authority establishes a committee consisting of the Heads of the school and at least two teachers to advise on the admission of candidates.

16. Decisions are based on (a) the child's performance at the primary school, and (b), his aptitude to follow instruction at the school to which he seeks admission. Aptitude is determined by at least one of the following means:

- an examination by the secondary school teachers covering at least arithmetic and Dutch;
- an experimental class offering at least 16 periods of 45 minutes each;
- a series of examinations during the sixth year of the primary school;
- psychological tests covering at least three aspects of intelligence (mathematical, verbal and technical).

17. Selection is very severe as witness the following data taken from a survey made in Curaçao in 1975:

second level schools	candidates	admitted	rejected	Students to re-sit examination
HAVO/VWO	410	326	77	7
MAVO	1618	1114	495	19
Lower vocational	1581	967	564	49
Home economics	920	565	328	27
Total	4529	2973	1454	102

Second-level education (vocational and technical)

18. Primary school leavers may also apply for admission to a vocational school. At the lower secondary level there are three types, namely:

- Lagere technische school (LTS) - lower technical school;
- Eenvoudig huishoudonderwijs (EHO) - elementary home economics; and Lager huishoudonderwijs (LHO) - lower home economics;
- Economisch touristisch en administratief onderwijs (ETAO) - education for commerce, tourist trades and office work.

19. The original function of the LTS type of school was to teach trades. In recent years, however, the schools have changed to an elementary technical education, including a subject called "creative work" and they use lighter and more suitable equipment. The intake is from the sixth, or more exceptionally, the fifth year of primary education. After the first year (a "common" or "bridge" year) the pupils are divided into three streams:

"T" stream - Technical stream preparing students for further technical education. Sixty per cent of the time is devoted to general education and forty per cent to technical subjects. The duration of the course is three years.

"Normal" stream - preparing for employment. The time is equally divided between general and vocational education. Duration: two years.

"P" stream - also preparing for employment, but with more emphasis on practical training. Duration: two years.

20. In most cases, the buildings of the lower technical schools are relatively new and suitable, but the machinery and tools in some of the schools need to be replaced. Prefabricated buildings have been added to certain rapidly expanding schools, but these are deemed unsatisfactory both by the teachers and students, because they are too noisy and not sufficiently insulated against the heat. An interesting innovation is planned in Bonaire, where a new LTS with workshops as part of a modern comprehensive school is being established.

21. The schools for Home Economics are at the same level as the LTS. There are two streams: normal (LHO) and practical (EHO). The practical stream prepares directly for employment, whereas about 23 per cent of the students who have completed the normal stream enroll in specialized courses (medical assistant, office administration, child care, etc.)

22. Schools for commerce, tourist trades and office work (ETAO) normally provide courses of three years' duration, although some offer an additional year. After the first year some 30 per cent of the students drop out, but this loss is compensated by intake into the second year of study from Grade I of MAVO schools. Six weeks per year are set aside for on-the-job training: two weeks in a hotel, two weeks in an office and two weeks in a shop. During this "stagiaire" period the students are regularly visited by the school staff. Part of the normal school activity consists of project work in "world orientation". Each student, under the guidance of his teacher, collects information and reports on a certain topic. These projects are then exhibited. This sort of activity is highly popular with both the staff and the students and could be considered as a sort of pre-training for research work.

23. At the upper secondary level, technical education is provided by two Middle Technical Schools (MTS), one in Curaçao and one in Aruba. Students are admitted from the fourth year of MAVO schools and from the fourth year technical stream of the LTS. The MTS offer a four-year course in building construction, electrical engineering and mechanical engineering. In Curaçao the mechanical engineering department is divided into two branches: production engineering and tool technology. The third year of the course is devoted to on-the-job training supervised by the school. The curriculum closely follows the Dutch system. As in the LTS there are 3 streams, namely general "A", technical "T", and practical "P". The programme is production-oriented and in Aruba, for instance, a complete house has been built by the students of the Construction Section.

24. The MTS in Curaçao has 300 students and 15 full-time and 5 part-time teachers. In Aruba the MTS, with 232 students, is housed in the same building as an LTS with 620 students. The two schools draw on the overall teaching staff of 50 full-time and 20 trainee teachers. The MTS in Curaçao has modern buildings with up-to-date equipment, but the school in Aruba has relatively old buildings with outmoded equipment needing replacement. A commission is at present working on plans for the improvement of the school complex.

25. In Curaçao there are seven LTS, nine schools of home economics, one MTS and one HTS. Aruba has three LTS, five schools of home economics and one MTS. Bonaire has one LTS and one school of home economics and St. Maarten has one home economics school. Total enrolment was 6,800 in 1972.

26. The staff of both LTS and MTS have the same qualifications, but those in the MTS are generally considered to be the pick of the crop. Graduates from the MTS are much sought after by the industries; nevertheless, a high percentage wish to pursue their studies at a higher level.

27. Vocational training outside the school system is sponsored by large industrial companies such as Shell and Lago for their own requirements. Shell, for instance, is operating an 18-month to 2-year administrative training course for 15 trainees, in financial administration, data processing, bookkeeping, secretarial work, etc., and an 18-month course for 32 to 35 oil plant operators. In addition, they run a number of management and upgrading courses. The staff consists of 18 full-time and 6 part-time instructors and the operational budget is 1,800,000 guilders. Twenty-eight fellowships are granted every year: 10 in Curaçao and 18 in Holland.

28. The Department of Labour in Curaçao carries out a vocational training programme for adults and at present a one-year course for 20 bricklayers and 20 carpenters is in operation. Similar courses are in preparation and will be carried out according to the needs.

29. A UNDP-financed project in Bonaire, for which the ILO is the Executing Agency, provides training in wood carving, silver and leather work. At present there are 27 trainees as well as a number of workers who have completed the training course. The products are offered for sale to tourists. The training course is run by the Bonaire Department of Labour with the help of three ILO experts.

Post-secondary education

30. Post-secondary education comprises the training of teachers for pre-primary, primary and technical education, the training of lawyers and business administrators, and the training of technicians.

31. Teachers are trained at an institution called "Pedagogical Academy". The Academy has two sections, one for the training of pre-primary (kindergarten) teachers, the other for the training of primary school teachers. Candidates for pre-primary are recruited from 4-year MAVO schools, and those for primary from the 5-year HAVO. The duration of training is three years in each section. There are two Academies, one in Aruba and one in Curaçao.

32. A technical teacher-training programme was established in 1971. The Dutch Government is supplying 1.5 million NAF to cover staff and equipment for this project. It consists of an in-service programme of two years' duration for teachers of practical subjects, while those wishing to teach both theoretical and practical subjects take a three-year course. The entrance qualifications required are the MTS diploma, plus an interview and a medical and psychological test. At present there are 38 trainees in Curaçao and another 37 or so in Aruba. Twenty-three part-time and two full-time teachers are in charge of the programme. Recently, closed-circuit television was installed in the Institute in Aruba for micro-teaching. Previously, Antillian technical teachers were trained in Holland, but in future it is expected that all teachers will be trained locally.

33. Lawyers and business administrators are trained at the Institute of Higher Education. Candidates for admission must have completed the 6-year VWO programme. The Faculty of Law provides a 4-year course leading to a M.A. degree. After further study and the preparation of a dissertation they may obtain a Doctorate in Law. The Faculty has two full-time professors and a number of part-time staff. Most of the students (70 - 80 per cent) are employed in administration or business and appear to be highly motivated.

34. The School of Business Administrators is an American type institution providing a course of 7 semesters (3½ years) in the field of management and business administration. During the last two semesters students concentrate on "projects" geared to the practical needs of the Netherlands Antilles in the areas of government and business. The school has one full-time professor and lecturers from the Netherlands and the United States.

35. A Higher Technical School (HTS) was founded in Curaçao in 1972, and is now called the Antillian Institute of Technology. The Institute offers a four-year post-secondary technical course leading to a Bachelor of Science degree. The third year is spent on practical training, half in Holland and half in Antillian industry. Students having VWO are admitted to the first year of studies and a preparatory year has been organized for candidates having a MAVO or MTS diploma. The table below shows the enrolment of the Institute during recent years:

Year	Total	Preparatory Year	First Year	Second Year	Third Year (Practical)	Fourth Year
1973/74	67	47	20	-	-	-
1974/75	107	52	46	9	-	-
1975/76	112	31	51	26	4	-

36. Before the establishment of the Institute, all training of higher technicians was carried out in Holland. Approximately 100 students went every year to Holland on fellowships and it was for this reason that the HTS was established to serve all six islands. The enrolment figures, however, show a high drop-out rate for which the following reasons are stated: students do not have a sufficient knowledge of the language of instruction (Dutch) to ensure effective communication; their inadequate background in science and technology education, which is a prerequisite to understanding technical subjects at this level; the curriculum has not been adapted to the Antillian situation; and Antillians do not have enough contact with technology in their daily lives.

37. The Institute is temporarily housed in buildings formerly occupied by the Shell school, and has laboratories in mechanical, electrical and chemical engineering. Plans are underway for a new building, including a civil engineering department, as part of a University. An amount of 10 million Antillian guilders has been earmarked for the building and equipment of this new University. At present, the staff consists of twelve full-time professors from Holland and a number of part-time teachers. Graduates from the Institute may continue their studies for another three years at one of the two technical universities in Holland.

Population per Island
1940-1973

December 31st	Nether- lands Antilles	Curaçao	Aruba	Bonaire	Sint Maarten	Sint Eustatius	Saba
1940	107,891	67,317	30,614	5,616	2,004	1,130	1,210
1950	162,684	102,206	51,000	5,079	2,300	970	1,129
1960	192,538	125,094	56,910	5,812	2,728	1,014	980
1968	216,355	141,393	59,231	7,844	5,547	1,335	1,005
1969	220,084	143,778	59,813	8,099	6,081	1,341	972
1970	223,827	145,707	60,734	8,191	6,881	1,358	956
1971	228,246	149,091	60,811	8,212	7,778	1,386	968
1972	230,824	150,008	61,293	8,181	8,970	1,401	971
1973	234,374	152,229	61,717	8,213	9,829	1,421	965

Source : Statistical Yearbook, 1974

Projection of the Population of the Netherlands Antilles (1)

1975-2000

Island	1975 (2)	1980 (2)	1985 (2)	1990 (2)	1995 (2)	2000 (2)
Curaçao						
minimum	159,500	175,800	192,500	208,200	222,700	237,000
maximum	159,500	177,300	198,000	220,700	243,700	267,600
Aruba						
minimum	65,000	70,600	75,800	79,900	83,100	86,100
maximum	65,000	70,900	77,500	84,100	90,100	95,600
Bonaire						
minimum	8,900	9,700	10,600	11,500	12,300	13,100
maximum	8,900	9,800	10,900	12,100	13,500	14,800
Windward Islands						
minimum	10,700	11,600	12,600	13,700	14,800	15,700
maximum	10,700	11,700	13,000	14,500	16,100	17,800
Total						
minimum	244,100	267,700	291,500	313,300	332,900	351,900
maximum	244,100	269,700	299,400	331,400	363,400	395,800

(1) Provisional figures - without taking into account the migration.

(2) On January 1st.

Source : Statistical Yearbook, 1974

Number of Inhabitants, Area and Population Density per Island, 1973

Island	Area (sq km)	Population	Density
Aruba	193	61,717	319
Bonaire	288	8,213	29
Curaçao	444	152,229	343
Saba	13	965	74
St-Eustatius	21	1,421	58
St-Maarten	34	9,829	289
Netherlands Antilles	993	234,374	236

Source : Statistical Yearbook, 1974

Economically Active Population 1972

Population	M	F	Total
Population age 14 and over	66,826	73,094	139,920
Active Population	42,137	20,437	62,574
Not active :			
Seeking employment	5,684	4,951	10,635
Not seeking employment	19,005	47,706	66,711

Source : Census 1972

Employed Persons by sectors in 1961, 1966 and 1972 (1)

Sector	Number			Index		
	1961	1966	1972	1961	1966	1972
<u>Netherlands Antilles</u>						
Agriculture and fishing	1,049	887	593	100	85	57
Mining and quarrying	674	455	443	100	68	66
Oil companies	11,455	6,207	4,828	100	54	42
Other industries	4,049	5,754	5,889	100	142	145
Construction	4,363	5,146	5,797	100	118	133
Electricity, gas and water supply	1,079	1,200	1,241	100	111	115
Wholesale trade and retail trade, restaurants and hotels (2)	7,607	8,314	15,767	100	109	207
of which hotels, boarding houses	3,003
Banking and Insurance (3)	672	959	2,540	100	143	378
Transport and Communications	3,844	4,084	5,208	100	106	135
Public services and public institutions	6,349	6,987)))) 18,794	100	110)))) 133
Other services	7,750	7,642)	100	99)
Not ascertained	2,773	5,130	2,546	100	185	91
<u>Total</u>	51,664	52,765	63,646	100	108	123

(1) Population Census data, 1972.

(2) In 1961 and 1966 restaurants, hotels, etc. were classified under Other Services.

(3) In 1972 Business services, such as legal services, engineering and architectural services, advertising services, etc. In 1966 these services were mentioned under Other Services.

Source : Statistical Yearbook, 1974

Unemployed Population by Level of Education - 1972

Education	Number of unemployed		
	M	F	T
Primary	3,533	2,646	6,179
Lower secondary	643	1,009	1,652
Full secondary	15	7	22
Lower technical	1,334	1,098	2,432
Middle technical	121	120	241
Higher technical	18	42	60
Education unknown	197	153	350
Total	5,861	5,075	10,936

Source : Statistical Yearbook, 1974

Proportion of Children at School, by Age and Type of School, 1972.

Age	Pre-Primary	Primary	Lower Secondary (MAVO)	Lower Vocational Education	Full Secondary (HAVO, VWO)	Middle Technical Education	Total Age-Group	Total Enrolled	Percent Enrolled
4	7,798	-	-	-	-	-	4,925	7,798	79
5	-	3,679	-	-	-	-	5,001	3,679	65
6	-	5,196	-	-	-	-	5,806	5,196	89
7	-	5,546	-	-	-	-	6,071	5,546	91
8	-	5,604	-	-	-	-	6,157	5,604	91
9	-	5,661	-	-	-	-	6,165	5,661	92
10	-	5,522	22	7	3	-	6,107	5,554	91
11	-	4,519	460	58	248	2	5,838	5,287	91
12	-	3,202	1,321	308	328	-	5,778	5,159	89
13	-	1,645	1,745	1,189	312	5	5,792	4,896	85
14	-	460	1,592	1,899	293	7	5,294	4,251	80
15	-	150	1,332	1,656	391	38	5,285	3,567	67
16	-	70	758	1,065	409	72	4,771	2,374	50
17	-	40	331	485	312	115	4,650	1,283	28
18	-	-	89	141	178	86	4,234	494	12
19+	-	-	-	-	-	-	-	-	-
All ages	7,798	41,294	7,650	6,808	2,474	325	87,491	66,349	76

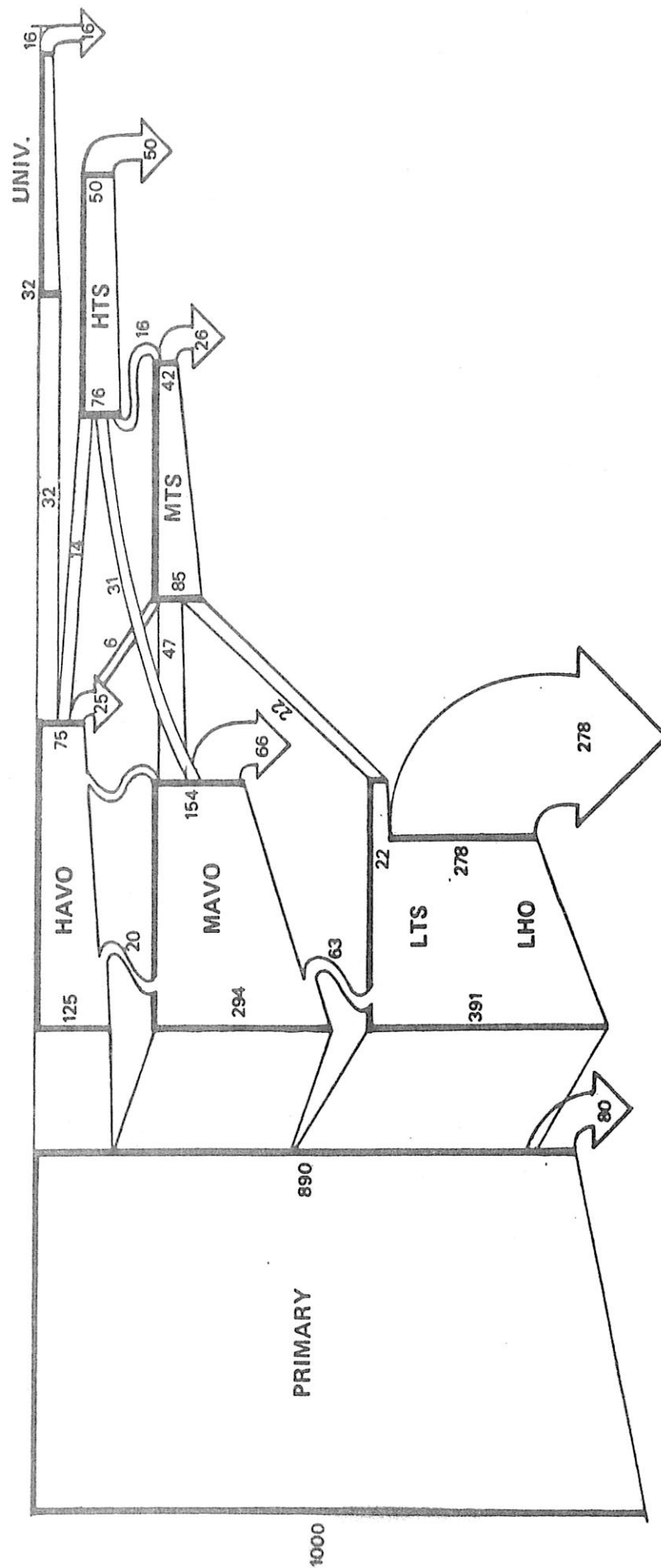
Source : Census 1972.

Enrolment by Types and Levels, Curaçao 1970/71 - 1974/75

School type	1970/71	1971/72	1972/73	1973/74	1974/75
Pre-primary schools	5,590	5,217	5,377	5,417	5,224
Primary schools	28,840	28,854	28,120	27,535	26,135
Special Education	800	900	997	1,157	1,163
ETAO	546	560	646	754	786
MAVO	4,972	4,830	4,671	4,682	4,811
HAVO/VWO	1,916	1,875	1,972	1,989	2,121
LTS	1,226	2,603	2,775	2,975	...
MTS	244	269	251	255	...
HHS	1,659	1,904	2,034	2,046	...
HTS	67	107
Pedagogical Academy	211	196	207	213	242
Institute of Higher Studies	...	83	30	57	65

Source : Department of Education, Curaçao

FLOW-CHART, SHOWING THE MOVEMENTS OF PUPILS THROUGH THE SYSTEM
Per 1000 pupils entering primary school



Source: Department of Education, Informatie blad nr 8, Curaçao, 1974.

Primary education, enrolment by island 1964/65 - 1974/75

Year	Aruba	Bonaire	Curaçao	Windward Islands	Total
1964/65	11,249	1,354	26,080	1,444	40,127
1965/66	11,602	1,417	27,074	1,552	41,645
1966/67	11,680	1,475	27,514	1,607	42,276
1967/68	11,559	1,535	28,408	1,691	43,193
1968/69	11,383	1,584	28,619	1,777	43,363
1969/70	11,055	1,636	28,868	1,917	43,476
1970/71	10,820	...	28,840
1971/72	10,693	1,681	28,854	1,929	43,157
1972/73	10,329	...	28,120	1,433	...
1973/74	9,763	...	27,535	1,678	...
1974/75	9,118	...	26,135	1,704	...

Source : Prepared by the mission on the basis of data provided by the Department of Education

Primary Education, Age-Grade Distribution, 1972

Grade \ Age	6	7	8	9	10	11	12	13	14+	All ages
I	3,455	2,627	681	143	55	24	41	-	-	7,026
II	61	2,460	2,673	1,216	428	149	20	33	-	7,040
III	-	29	2,082	2,415	1,508	683	210	47	81	7,055
IV	-	-	28	1,720	2,220	1,582	895	332	134	6,911
V	-	-	-	27	1,342	1,920	1,526	972	484	6,271
VI	-	-	-	-	26	1,074	1,700	1,597	1,174	5,571
VII	-	-	-	-	-	7	55	93	95	250
Grade Unknown	163	80	82	83	82	83	72	128	397	1,170
Total enrolment	3,679	5,196	5,546	5,604	5,661	5,522	4,519	3,202	2,365	41,294
Total in Age-Group	5,617	5,806	6,071	6,157	6,165	6,107	5,838	5,778
Per Cent Enrolled	65	89	91	91	92	90	77	55

Source : Census 1972.

Primary Education Enrolment by Grade, Aruba and Curaçao
1971/72 - 1975/76

Year	Grades							Total
	I	II	III	IV	V	VI	VII	
1971/72	7,011	7,038	6,767	6,703	6,227	5,385	416	39,547
1972/73	6,594	6,756	6,455	6,599	6,405	5,669	234	38,712
1973/74	6,204	6,264	5,507	6,279	6,200	5,638	247	36,339
1974/75	5,967	5,774	5,939	5,994	6,034	5,372	173	35,253
1975/76	6,064	5,813	5,526	5,929	5,980	5,286	129	34,727

Source : Department of Education.

Primary Education
Percentage of Repeaters in Curaçao by Grade
1971/72 - 1974/75

Year	Grades						
	I	II	III	IV	V	VI	VII
1971/72	26.3	21.3	18.6	18.8	16.6	13.6	15.4
1972/73	26.2	22.7	17.5	15.4	14.7	13.5	20.1
1973/74	21.7	20.4	19.6	18.2	18.9	17.3	14.9
1974/75	24.3	22.7	20.8	19.6	20.0	18.7	14.9

Source : Department of Education

Age-Grade Distribution, General Secondary Education
First Cycle (MAVO) - 1972

Age Grade	11	12	13	14	15	16	17	18	19+	All ages
I	3	394	872	715	221	37	-	-	-	2,242
II	-	11	337	669	575	273	57	-	-	1,922
III	-	-	8	209	471	548	300	81	-	1,617
IV	-	-	-	23	209	380	319	192	54	1,177
Grade unknown	19	55	104	129	116	94	82	58	77	734
Total enrolment	22	460	1,321	1,745	1,592	1,332	758	331	131	7,692
Total in age-group	6,107	5,838	5,778	5,792	5,294	5,285	4,771	4,650
Percent enrolled	-	8	23	30	30	25	16	7

Source : Census 1972.

Enrolment by Grades, General Secondary EducationFirst Cycle (MAVO) (1)1971/72 - 1974/75

Year	Grades				Total
	I	II	III	IV	
1971/72	1,563	1,335	1,175	634	4,707
1972/73	1,325	1,335	2,453	725	5,838
1973/74	1,455	1,261	1,164	777	4,657
1974/75	1,558	1,357	1,267	932	5,114

(1) This table prepared by the mission shows enrolment in 17 MAVO schools (9 in Aruba and 8 in Curaçao).

The total number of MAVO schools is 31.

Age-Grade Distribution, Lower Vocational Training

First cycle (LBO), 1972

Grade \ Age	12-	13	14	15	16	17	18+	All ages
I	48	264	883	855	313	63	29	2,455
II	-	29	238	761	786	325	133	2,272
III	-	-	26	215	479	603	354	1,677
Grade unknown	17	15	42	68	78	74	148	442
Total enrolment	65	308	1,189	1,899	1,656	1,065	664	6,846
Total in age-group	5,838	5,778	5,792	5,294	5,285	4,771
Percent enrolled	1	5	21	36	31	22

Source : Census 1972.

Age-Grade Distribution, Full General Secondary Education
(HAVO-VWO) 1972

Age Grade	12-	13	14	15	16	17	18	19+	All ages
I	228	149	27	-	-	-	-	-	404
II	-	159	141	31	-	-	-	-	331
III	-	-	133	148	68	35	-	-	384
IV	-	-	-	99	229	180	119	17	644
V	-	-	-	-	64	158	152	143	517
VI	-	-	-	-	1	5	7	3	16
Grade unknown	23	20	11	15	29	31	34	141	304
Total enrolment	251	328	312	293	391	409	312	304	2,600
Total age-group	5,838	5,778	5,792	5,294	5,285	4,771	4,650
Percent enrolled	4	6	5	6	7	9	7

Source : Census 1972.

Enrolment by Grade, full secondary education, 1971/72 - 1974/75 (1)

Year	Grades						Total
	I	II	III	IV	V	VI	
1971/72	325	260	405	577	500	-	2,067
1972/73	350	302	277	593	470	-	1,992
1973/74	397	314	283	588	358	74	2,014
1974/75	382	374	328	578	359	129	2,150

(1) Three out of four HAVO/VWO schools.

Source : Data collected by the Mission.

Age-Grade Distribution, Middle Level Technical Education
(MTE) 1972

Grade \ Age	16-	17	18	19	20	21+	All ages
I	38	45	68	32	15	6	204
II	...	13	22	27	33	10	105
III	...	5	12	24	11	29	81
IV	...	8	5	1	2	9	25
Grade unknown	14	6	8	2	1	5	36
Total enrolment	52	77	115	86	62	59	451
Total in age-group	5,285	4,771	4,650	4,234	4,005
Percent enrolled	1	2	2	2	2

Source : Census 1972.

Antillian and Expatriate Teachers By Type and Level of Education

1970/71 - 1974/75

Level of education	1970/71					1974/75				
	Antillian	Expatriate	Total	Percent		Antillian	Expatriate	Total	Percent	
				Ant.	Exp.				Ant.	Exp.
Pre-primary education	218	33	251	87	13	248	29	277	90	10
Primary education	834	482	1,316	63	37	1,116	472	1,588	70	30
Secondary education	144	324	468	31	69	252	392	644	39	61
Technical education	169	127	296	57	43	146	91	237	62	38
Vocational education	69	32	101	68	32	104	60	164	63	37

Source : Department of Education

Training of Teachers for Pre-Primary Education

1. Enrolment at the Pedagogical Academy - Curaçao
1970/71 - 1974/75

Year	Grades				Total
	I	II	III	IV	
1970/71	18	18	15	51	102
1971/72	29	21	16	42	108
1972/73	30	17	15	34	96
1973/74	39	24	17	31	111
1974/75	30	34	24	30	118

Source : Data prepared by the mission.

2. Enrolment at the Pedagogical Academy - Aruba
1970/71 - 1974/75

Year	Grades			Total
	I	II	III	
1970/71	18	17	8	43
1971/72	14	20	12	46
1972/73	12	16	13	41
1973/74	17	12	13	42
1974/75	15	13	9	37

Source : Data prepared by the mission.

Training of Teachers for Primary Education1. Enrolment at the Pedagogical Academy - Curaçao1970/71 - 1974/75

Year	Grades						Total
	I		II		III		
	M	F	M	F	M	F	
1970/71	13	23	17	18	21	17	109
1971/72	14	24	7	18	10	15	88
1972/73	20	33	9	20	19	10	111
1973/74	14	27	11	26	7	17	102
1974/75	15	32	14	29	9	25	124

Source : Data prepared by the mission.2. Enrolment at the Pedagogical Academy - ArubaPrimary Teacher Training1970/71 - 1974/75

Year	Grades			Total
	I	II	III	
1970/71	43	38	34	115
1971/72	41	38	31	110
1972/73	30	40	33	103
1973/74	20	31	36	87
1974/75	14	17	35	66

Source : Data prepared by the mission.

Enrolment in Higher Education1. School of Law and Business Administration1971/72 - 1975/76

Year	School of Law			School of Business Administration			Total		
	M	F	T	M	F	T	M	F	T
1971/72	18	65	83	-	-	-	18	65	83
1972/73	3	27	30	-	-	-	3	27	30
1973/74	6	28	34	22	1	23	28	29	57
1974/75	10	20	30	30	5	35	40	25	65
1975/76	18	23	41	18	7	25	36	30	66

Source : Prepared by the mission.2. Institute of Technology1973/74 - 1975/76

Year	Preparatory Year	First Year	Second Year	Third Year (practical)	Fourth Year	Total
1973/74	47	20	-	-	-	67
1974/75	52	46	9	-	-	107
1975/76	31	51	26	4	-	112

Source : Prepared by the mission.

Central Government Expenditure for Education 1972-1976 (Thousands of Naf)

Object of Expenditure	Actual Expenditure		Estimated Expenditure		Budget
	1972	1973	1974	1975	
Department of Education	1,498	1,333	1,820	1,915	2,997
Training courses	472	558	540	600	903
Study Grants	1,301	1,262	1,491	1,125	2,750
<u>Subsidies :</u>					
Marine school	135	135	154	160	160
Pedagogical academy	-	184	393	1,000	1,000
Higher Education	56	81	396	675	320
Higher Technical Education	38	70	998	500	725
Training secondary school teacher	-	31	-	247	110
Other	236	199	200	250	389
Total	3,736	3,853	5,992	6,472	9,354
Percent of total Central Government Expenditure	2.9	2.8	4.1	3.2	4.8

Source : Ministry of Finance.

Curaçao, Current Expenditure 1967 - 1976

(millions of NAf)

Object of Expenditure	1967	1968	1969	1970	1971	1972	1973(1)	1974(1)	1975(2)	1976(2)
1. General administration	3.6	4.0	4.5	5.3	5.5	6.1	6.8	6.9	9.2	9.6
2. Public safety	0.9	1.0	1.1	1.2	1.6	1.8	1.7	1.5	3.1	4.3
3. Public health	4.2	4.6	5.2	6.9	7.9	8.9	7.6	8.8	13.8	16.4
4. Water supply	0.6	0.8	1.2	2.7	2.6	2.8	-	-	5.5	5.7
5. Public housing	0.5	0.6	0.8	1.2	1.7	1.5	-	-	3.4	3.7
6. Transport and communications	4.1	3.4	2.5	3.6	4.4	5.0	2.7	-	7.6	9.8
7. Economic affairs	2.8	3.0	3.9	3.9	4.4	4.9	4.6	5.0	8.7	10.1
8. Social affairs	5.7	6.9	7.7	8.8	12.4	13.7	14.5	17.8	22.7	29.3
9. <u>Education and culture</u>	18.7	20.5	27.4	28.3	30.9	36.4	37.5	45.6	58.4	66.0
10. Miscellaneous	2.8	4.4	3.8	5.2	5.9	8.2	3.9	6.2	10.6	12.7
11. <u>Sub-Total</u>	43.9	49.2	58.1	67.1	77.3	89.3	-	-	143.0	167.6
12. Tax revenue transferred to Central Government and Aruba	9.0	11.1	12.4	13.1	16.4	19.9	23.6	23.2	31.3	35.8
13. <u>Total</u>	52.9	60.3	70.5	80.2	93.7	109.2	-	-	174.3	203.4
14. Education expenditure as percent of island expenditure line 9 - line 11	43.0	42.0	47.0	42.0	40.0	41.0	-	-	41.0	39.0

(1) Provisional

(2) Budget estimates

Source : Island Government of Curaçao

Curaçao, Current Expenditure by Level and Type of Education 1973-1976

Object of Expenditure	Estimated Expenditure				Budget			
	1973		1974		1975		1976	
	1,000 Naf	%	1,000 Naf	%	1,000 Naf	%	1,000 Naf	%
Administration	796	2.4	831	2.0	1,129	2.1	1,499	2.5
Pre-primary	1,519	4.5	2,138	5.1	2,481	4.7	3,099	5.2
Primary	13,003	38.6	16,516	39.7	21,766	41.1	22,547	38.1
HAVO-ETAO	6,177	18.3	7,766	18.7	8,377	15.8	9,324	15.8
Special Education	1,323	3.9	1,995	4.8	2,421	4.6	3,019	5.1
HAVO-VWO	3,624	10.8	4,305	10.3	5,656	10.7	6,617	11.2
Vocational Education	4,967	14.8	5,623	13.5	8,079	15.3	9,300	15.7
Technical Education	2,254	6.7	2,411	5.8	3,053	5.8	3,705	6.3
Total	33,663	100	41,585	100	52,962	100	59,110	100

Source : Eilandgebied Curaçao, Begrotingen van de Algemene Dienst, 1976

Curaçao, Estimated Cost per Pupil per Year by Level and Type of Education, 1976

Type of education	Naf	U.S. \$	Index (primary = 100)
Pre-primary	457	258	60
Primary	759	429	100
MAVO-ETAO	1,415	799	186
HAVO-VWO	2,511	1,419	331
LTS-EHO	1,835	1,037	242
MTS	2,660	1,503	350
Special education	2,271	1,283	299

Source : Eiland Gebied Curaçao, Memorie van Toelichting, op de Begrotingen van de Algemene dienst, 1976.

Average Teachers' Salaries in a Selected Number of Countries in Relation
to GNP or GDP per capita

Country and Year	Primary Education		Secondary Education	
	Salary Equiv. in US \$	Salary/GNP or GDP per capita	Salary Equiv. in US \$	Salary/GNP or GDP per capita
1. Curaçao, 1973	8,238	5.5	11,322	7.6
2. Germany, FR, 1972	7,644	1.8	9,336	2.2
3. Gabon, 1972	3,648	3.5	7,401	7.1
4. Lebanon, 1971	3,498	5.3	5,636	8.2
5. Togo, 1972	2,746	15.6	5,592	31.8
6. Barbados, 1972	2,519	3.2	4,102	5.3
7. Greece, 1971	2,278	5.1	2,440	5.2
8. Morocco, 1971	2,071	8.6	2,988	12.5
9. Korea, Rep. 1970	1,684	6.4	2,261	8.6
10. Ivory Coast, 1970	1,470	5.0	4,048	13.9
11. Jordan, 1971	1,411	4.2	2,419	7.2
12. Somalia, 1971	755	15.1	1,299	25.9
13. Philippines, 1973	749	4.3	749	4.3
14. Bolivia, 1973	675	3.6	779	4.1
15. Burma, 1972	415	5.9	852	12.2
16. Burundi, 1970	366	5.6	2,172	33.4
17. Nepal, 1971	304	3.4	839	9.4
18. Pakistan, 1973	303	3.6	743	8.9
19. Afghanistan, 1972	264	2.8	533	5.6
20. Indonesia, 1971	159	1.9	286	3.4

Source : Educational Financing Division, Unesco